# US EPA Region 9

EPCRA §302-312 / CERCLA §103 / Clean Air Act §112(r)(1) Inspection Report

| | |
|---|---|
| *Stationary Source* | Allenco Energy Inc. |
| *Date of Inspection* | November 6, 2013 |
| *USEPA Contact* | Jeremy Johnstone, USEPA Region 9 |
| *Description of Activities* | Opening meeting with facility representatives<br>Inspection consisting of the following activities:<br>-Document review<br>-Field verification<br>-Personnel interviews<br>Closing meeting with facility representatives |
| *Inspection Participants* | Jeremy Johnstone, USEPA Region 9 Inspector 415-972-3499<br>johnstone.jeremy@epa.gov<br><br>Travis Cain, USEPA Region 9 Inspector 415-972-3161<br>cain.travis@epa.gov<br><br>Janice Witul, USEPA Region 9 Inspector 415-972-3089<br>witul.janice@epa.gov<br><br>David Basinger, USEPA Region 9 Inspector 415-972-3506<br>basinger.david@epa.gov<br><br>Tim Parker, VP Operations, 562-989-6100<br>tparker@allencoca.com<br><br>Logan Allen, VP Sales, 562-989-6100<br>lallen@allencoca.com |

## STATIONARY SOURCE INFORMATION

| | |
|---|---|
| *USEPA Facility ID #* | NA |
| *Most Recent Submission* | NA |
| *Facility Location* | 814 w. 23rd St.<br>Los Angeles, CA 90007 |
| *Lat / Long* | 34.032°S, -118.278°W |
| *Number of Employees* | 4 |
| *Description of Surrounding Area* | Urban, Mount St. Mary's College adjacent to east, south and west, residential across the street to the north |

## REGISTRATION INFORMATION

| | |
|---|---|
| *Process ID #* | NA |
| *Program Level* | NA |
| *Process Chemicals* | Crude oil, methane |
| *NAICS Code* | 211111, Crude Petroleum & Natural Gas Extraction |

## PURPOSE OF INSPECTION

An evaluation of compliance with Sections 302-312 of the Emergency Planning and Community Right-to-Know Act (EPCRA),Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and Section 112(r)(1)of the Clean Air act (CAA) was conducted as part of a multi-media inspection of Allenco Energy Inc. (Allenco) crude oil pumping/separation/transfer facility in Los Angeles, CA. In addition the afore-mentioned authorities the inspection also included compliance evaluations under the Clean Air Act's Stationary Source Program and the Spill Prevention, Control, and Countermeasure (SPCC) program of the Oil Pollution Act (OPA). The inspection was prompted by concerns about the facility that had been expressed by the local community.

This report discusses the inspection under the above-mentioned EPCRA, CERCLA and CAA §112(r) authorities. Separate reports will be prepared for inspection activities under the other authorities.

## Opening meeting

Inspector Johnstone presented his credentials and EPA inspection documents consisting of a Notice of Inspection, Right to Claim Confidentiality and Receipt for Documents and explained their contents. The facility representative and EPA inspector signed all copies prior to the end of the inspection and copies of signed documents were left with the facility.

## FACILITY / PROCESS DESCRIPTION

Allenco operates a crude oil secondary recovery pumping, separation and transfer facility in south Los Angeles which produces crude oil, natural gas and produced water from five active wells. Allenco operates the facility under a lease agreement with the Catholic Archdiocese, which owns the land. The facility reportedly dates to the late 1960s, although Allenco only assumed operational control of the facility in 2009 from the predecessor operator St. James Oil. At the time of facility transfer, all 21 production wells were idle, but in 2010 Allenco restarted five of the wells and currently produces approximately 80 barrels of crude oil and 8000 barrels of produced water daily. The produced water is reinjected into the formation via a single injection pump in order to enhance further oil recovery. Crude oil is metered into the Crimson Oil Pipeline for sale. The facility also produces natural gas from the formation, this gas is consumed in onsite microturbines and the resulting electricity is fed into the local power grid for sale.

Operating equipment at the facility includes, wellhead pumps, produced fluids transfer pumps, free water knockout, test separators, crude storage tanks, produced water tanks, gas separator unit, vapor recovery unit, water injection pump, microturbines. The facility also has "Fire Eye" flame detectors and methane detectors at a few locations in the facility, as well as a water deluge system in the well gallery and three fire monitors (water cannons) along the south wall of the production pit.

## OBSERVATIONS/FINDINGS

### EPCRA §311-312:

1. The facility provided a copy of the California Hazardous Material Business Plan (HMBP) Hazardous Materials Inventory (EPCRS §312 Tier II equivalent) that had been submitted to the City of Los Angeles Fire Dept. (the CUPA) on September 11, 2013. The CUPA inspector had notified the facility in October 24, 2013 that the submittal was incomplete. There was no evidence of any previous submittals, and a subsequent call to the CUPA verified that none had been made.

**EPCRA §304 / CERCLA §103:**

1. Neither methane nor crude oil have a reportable quantity (RQ) established under either EPCRA or CERCLA. In addition, facility representatives reported that the facility has not had any significant releases of any hazardous chemical during its tenure as operator of the facility.

**CAA §112(r)(1) General Duty Clause:**

The obligations of the General Duty Clause apply to the crude oil and natural gas produced at the facility both may be considered Extremely Hazardous Substances within the meaning of the GDC. Therefore, evaluation of GDC compliance at the facility under this investigation was evaluated with respect to the facility's operation of components that handle, and would have the potential to be involved in an accidental release of, either of these materials.

1. On the day of the inspection no significant petroleum-based odors were apparent. Most noticeable was a slight odor of orange peel oil, which facility representatives indicated was used to mask other odors. (See Photo 20)

2. The name plate on the facility's Free Water Knock Out (FWKO) pressure vessel indicates that it was constructed in 1967. Nameplates for the other pressure vessels had been painted over and were illegible. (See Photos 8, 10)

3. External corrosion was visible on the lower pressure vessel of the west test separator. (See Photo 11)

4. The facility produced a report dated December 2012 documenting the results of tank shell thickness testing that the facility had had performed under AB1960. Other tan this report the facility had no documentation available to document conformance with Recognized and Generally Acceptable Good Engineering Standards (RAGAGEPs).

5. Other than the report indicated in Item 4 immediately above, the facility was not able to provide documentation of conformance with Inspection, Testing and Preventive Maintenance (ITPM) RAGAGEPs, particularly API 653, API 510, API 570, and API RP 576.

## RECOMMENDATIONS / POTENTIAL VIOLATIONS:

**Potential Violation: EPCRA §312**

The facility did not submit any HMBP Inventory/Tier II reports for Reporting Years 2009-2011 to CUPA.

**Potential Violation: CAA §112(r)(1)**
The facility was not able to document that it is operating a safe facility in that there is no evidence of its conformance with any of the following applicable RAGAGEPs:

API 653 - Tank Inspection, Repair, Alteration, and Reconstruction (with respect to the facility's atmospheric tanks)

API 510 - Pressure Vessel Inspection Code: In-Service Inspection, Rating, Repair, and Alteration (with respect to the facility's free water knockout and separator vessels)

API 570 – Piping Inspection Code: In-service Inspection, Rating, Repair, and Alteration of Piping Systems (with respect to the facility's produced fluids, crude and natural gas piping)

API RP 576 - Inspection of Pressure Relieving Devices (for PRDs on FWKO and separators)

Manufacturers' specifications for the maintenance and calibration of the flame detectors and methane detectors installed onsite.

**List of Attachments –**

1. EPCRA §§302-312 / CERCLA §103 Inspection Checklist
2. Signed Notice of Inspection Form
3. Signed Notice of Right to Claim Confidentiality Form
4. Signed Receipt of Documents Form
5. Inspection Participation Sign-in Sheet
6. Photo Log
7. Facility Documents

12.3.13
Jeremy Johnstone (date)

12-5-13
Reviewer

ATTACHMENT 1 –

EPCRA §§302-312 / CERCLA §103 Inspection Checklist

**EPCRA §§302-312/CERCLA §103**
**Inspection Checklist**
**EPA Region 9**

**Inspection Date/Time:** 6 November 2013 0930

**Facility Name:** Allenco Energy Inc.

**Facility Address:** 814 W. 23rd St.
Los Angeles, CA 90007

**Facility Rep. Name/Title/Phone #:**
Tim Parker, VP operations
562 989 6100

**Inspector's Name/Phone #:** Jeremy Johnstone, 415-972-3499

1. LEPC/CUPA and Fire Department contact(s) (include contact name and phone numbers)
LAFD CUPA
nearest station - Figueroa @ 23rd st

2. Brief description of receptors (residents, schools, other facilities, etc.)

Distance to receptors
< 1/4 mile
< 1 mile
< 4 miles
> 4 miles

3. Number of employees 4

4. Hours of operation: 24/7 pumper always here

5. Brief description of operation (hazardous substances used or stored on-site)
oil prodxn
Allenco has operated site since Sept 16, 2009
lease had been idle ≥ 2 yrs before that
1st operational 1967, Arco
St James 1987-09

6. a) Has facility had EHSs on site at any time in the last three calendar years in an amount equal to or greater than the TPQ? ☐ Yes ☐ No

b) Has facility had a CERCLA HS or an OSHA HS on site at any time during the last three calendar years in an amount equal to or greater than 10,000 lbs. (Or in California, more than the CA listed TPQ)? ☐ Yes ☐ No

7. EPCRA §303: Has facility provided name and contact information for the Facility Emergency Response Coordinator? (If yes, request copy)

Yes No

8. EPCRA §304/CERCLA §103: Has facility had any accidental releases of reportable quantities of EHSs or CERCLA HSs? If yes, fill in the information on the table in Attachment 1 and request documentation (monitoring equipment data, maintenance logs, spill reports, etc.).

Yes (No)

| Release Summary | | |
|---|---|---|
| **Release Date, Time and Amount** (When was facility aware of the release.) | **Chemical Name(s)/CAS #(s)** | **To Whom Reported (include report number(s), dates and times and request copies of spill reports and letters)** |
| | | |
| | | |
| | | |
| | | |
| | | |

9. EPCRA §311: Has facility provided either a list or MSDSs for EHSs on site in quantities equal to or greater than the TPQs?

Yes No (If yes, request copy)

10. EPCRA §312: Has facility provided a Tier II annual hazardous substance inventory to the SERC, LEPC and Fire Department (or in California, a Hazardous Material Disclosure with their Business Plan to the CUPA)?

Yes No (If yes, request copy)

List years and dates of submittal:

| Tier II Inventory Information | | |
|---|---|---|
| **Reporting Year** | **Agency to Whom Submitted** | **Date Submitted (verified by agency - y/n)** |
| | | |
| | | |
| | | |
| | | |
| | | |

ATTACHMENT 2 –

Signed Notice of Inspection Form

# NOTICE OF INSPECTION

## U.S. ENVIRONMENTAL PROTECTION AGENCY
## Region IX

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) §103;
Emergency Planning and Community Right-to-Know Act (EPCRA) §§302-312; and
Clean Air Act §112r Risk Management Program (CAA RMP)

| **DATE/TIME:** | **FACILITY NAME:** |
|---|---|
| 6 November 2013 0930 | Allenco Energy Inc. |
| **INSPECTOR (NAME, ADDRESS, PHONE):** | **FACILITY ADDRESS:** |
| Jeremy Johnstone 415-972-3499<br>USEPA Region 9 (SFD-9-3)<br>75 Hawthorne St., San Francisco CA 94105 | 814 W. 23rd St.<br>Los Angeles, CA 90007 |

**REASON FOR INSPECTION:** U. S. EPA is conducting this inspection for the purpose of determining compliance with the requirements of Section 103(e) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Sections 302 through 312 of the Emergency Planning and Community Right-to-Know Act (EPCRA), and Section 112(r) of the Clean Air Act (CAA).

The scope of this inspection may include, but is not limited to reviewing and obtaining copies of documents and records; interviews and taking of statements; reviewing of chemical manufacturing, importing, processing, and/or use facilities, including waste handling and treatment operations; taking samples and photographs; and any other inspection activities necessary to determine compliance with the Acts.

| INSPECTOR SIGNATURE | | RECIPIENT SIGNATURE | |
|---|---|---|---|
| NAME<br>Jeremy Johnstone | | NAME<br>Tim Tarkir | |
| TITLE<br>Environmental Engineer | DATE SIGNED<br>11-6-13 | TITLE<br>Vice President | DATE SIGNED<br>11-6-13 |

ATTACHMENT 3 –

Signed Notice of Right to Claim Confidentiality Form

# RECEIPT OF NOTICE OF RIGHT TO CLAIM CONFIDENTIALITY

**U.S. ENVIRONMENTAL PROTECTION AGENCY**
**Region IX**
Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) §103;
Emergency Planning and Community Right-to-Know Act (EPCRA) §§302-312; and
Clean Air Act §112r Risk Management Program (CAA RMP)

| **DATE/TIME:** | **FACILITY NAME:** |
|---|---|
| 6 November 2013 0930 | Allenco Energy Inc. |
| **INSPECTOR (NAME, ADDRESS, PHONE):** | **FACILITY ADDRESS:** |
| Jeremy Johnstone 415-972-3499<br>USEPA Region 9 (SFD-9-3)<br>75 Hawthorne St., San Francisco CA 94105 | 814 W. 23rd St.<br>Los Angeles, CA 90007 |

**Notice of Right to Claim Confidentiality:** You may assert a business confidentiality claim covering all or part of the information requested during the course of this inspection, as provided in 40 C.F.R. §2.203(b). To make a confidentiality claim, submit the requested information and indicate that you are making a claim of confidentiality. Any document over which you make a claim of confidentiality should be marked by either attaching a cover sheet stamped or typed with a legend to indicate the intent to claim confidentiality. The stamp or typed legend or other suitable form of notice should employ language such as "trade secret" or "proprietary" or "company confidential" and indicate a date if any when the information should no longer be treated as confidential.

All confidentiality claims are subject to agency verification and must be made in accordance with 40 C.F.R. §2.208 which provides in part that you satisfactorily show that you have taken reasonable measures to protect the confidentiality of the information and that you intend to continue to do so; and that the information is not and has not been, reasonably obtainable by legitimate means without your consent.

**NOTE:** Signature of this Receipt of Notice of Right to Claim Confidentiality verifies only that such notice has been received and does not waive that right.

| INSPECTOR SIGNATURE | | RECIPIENT SIGNATURE | |
|---|---|---|---|
| NAME<br>Jeremy Johnstone | | NAME<br>Tim Tarker | |
| TITLE<br>Environmental Engineer | DATE SIGNED<br>11.6.13 | TITLE<br>Vice President | DATE SIGNED<br>11-6-13 |

ATTACHMENT 4 –

Signed Receipt of Documents Form

# RECEIPT OF DOCUMENTS
## U.S. ENVIRONMENTAL PROTECTION AGENCY
### Region IX

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) §103;
Emergency Planning and Community Right-to-Know Act (EPCRA) §§302-312; and
Clean Air Act §112r Risk Management Program (CAA RMP)

| DATE/TIME: | FACILITY NAME: |
|---|---|
| 6 November 2013 0930 | Allenco Energy Inc. |
| **INSPECTOR (NAME, ADDRESS, PHONE):** | **FACILITY ADDRESS:** |
| Jeremy Johnstone 415-972-3499<br>USEPA Region 9 (SFD-9-3)<br>75 Hawthorne St., San Francisco CA 94105 | 814 W. 23rd St.<br>Los Angeles, CA 90007 |

During inspection, copies of the following documents were received from the above referenced facilities:

| Document Date | Author | Title |
|---|---|---|
| 1 | St. James Oil Corp | Site Map for Business Plan ① |
| 12/13/02 | DPSI | * ABI960 certified Inspxn Tanks 4-6 |
| | " | * P&IDs for |
| | " | * Testing and Inspxn Records 2009 - present: |
| | " | * • Fire Eye/combustible gas detector |
| | " | * • methane detector |
| | | * • oil flow lines (API 570) |
| | | * • FWKO tank (API 570) |
| | | * • Fire monitors |
| 2013 | | * 2013 HMBP Chemical Inventory |
| undated | | * St James oil HMBP chemical inventory |
| | | * Testing & PM records 2009 - present |
| | | for all Pressure Relief devices |
| | | * HMBP Chem inventories 2009-2012 |

| INSPECTOR SIGNATURE | RECIPIENT SIGNATURE |
|---|---|
| | Tim Parker |
| NAME: Jeremy Johnstone | NAME: Tim Parker |
| TITLE: Environmental Engineer | DATE SIGNED: 11-2-13 |
| | TITLE: Vice President |
| | DATE SIGNED: 11-6-13 |

① * - To be provided by 11/15/13, pdf copies preferred

ATTACHMENT 5 –

Inspection Participation Sheet

# INSPECTION ATTENDANCE / PARTICIPANT LIST

| | |
|---|---|
| **Date:** 6 November 2013 0930 | **Facility Name:** Allenco Energy Inc. |
| **INSPECTOR (NAME, ADDRESS, PHONE):**<br>Jeremy Johnstone<br>US EPA Region 9, SFD-9-3<br>75 Hawthorne St.<br>San Francisco, CA 94105<br>Phone No.: (415) 972-3499 | **FACILITY ADDRESS:**<br>814 W. 23rd St.<br>Los Angeles, CA 90007<br><br>**Tel.** 562-989-6100 |

| NAME | AFFILIATION | TITLE | PHONE NO. | E-mail Address |
|---|---|---|---|---|
| Jeremy Johnstone | USEPA Region 9 | Env. Engr. | 415-972-3499 | johnstone.jeremy@epa.gov |
| Logan Allen | Allenco | VP. Sales | 404 388 4946 | LAllen @ Allencoca.com |
| ~~Tim Tarker~~ | Allenco | V.P. | (562) 989-6100 | TTARKER @ ALLENCOCA.COM |
| JANICE WITUL | US EPA | INSPECTOR | 415 972 3389 | witul.janice@epa.gov |
| Travis L. CAin | USEPA | Inspector | 415-972-3161 | CAin.Travis@EPA.GOV |
| DAVE BASWGER | USEPA | INSPECTOR | 415 972 3506 | basinger.david@epa.gov |
| Steve Collins | Pacific Environmental | Observer (Diesel) | 888-303-6484 | mike@pacificenvironmental.com |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

ATTACHMENT 6 –

Digital Camera Photo Log – Archival Images

U.S. Environmental Protection Agency
Region 9 Emergency Prevention & Preparedness Program

# INSPECTION PHOTO LOG

| Facility Name & Location: | Photographer: | Camera: |
|---|---|---|
| ALLENCO ENERGY LOS ANGELES, CA | T. CAIN | CANON SX230 |

**Dates Photographs Were Taken:**
11/6/2013

**Photo No.**
1

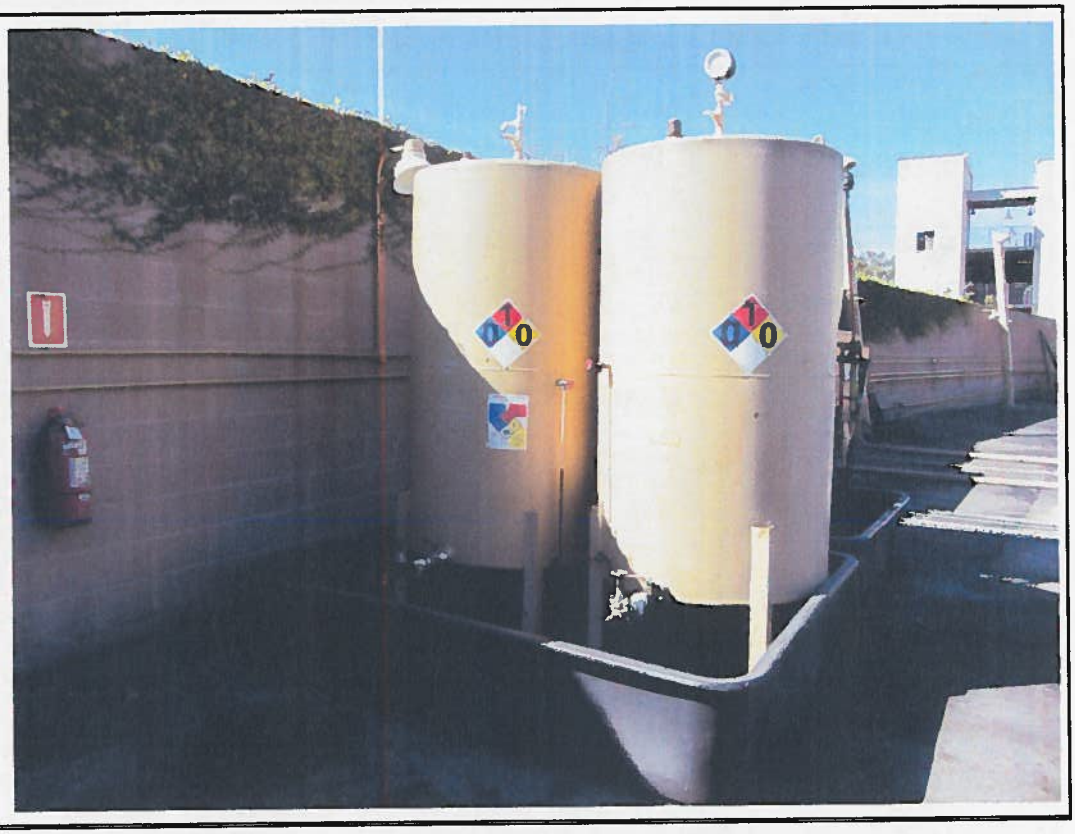
**Photo Description:**

View east into production area. Scrubber in foreground, FWKO (round horizontal vessel) in center back, brine tank to near left, crude tank to back left.

**Photo No.**
2

**Photo Description:**

Scale inhibitor added to produced water injectate

| | |
|---|---|
| **Photographer:** CAIN |  |
| **Photo No.** 3 | |
| **Photo Description:** Hydraulic oil storage, south of well gallery | |

| | |
|---|---|
| **Photo No.** 4 |  |
| **Photo Description:** View west from inside well gallery | |

**Photographer:**
CAIN

**Photo No.**
5

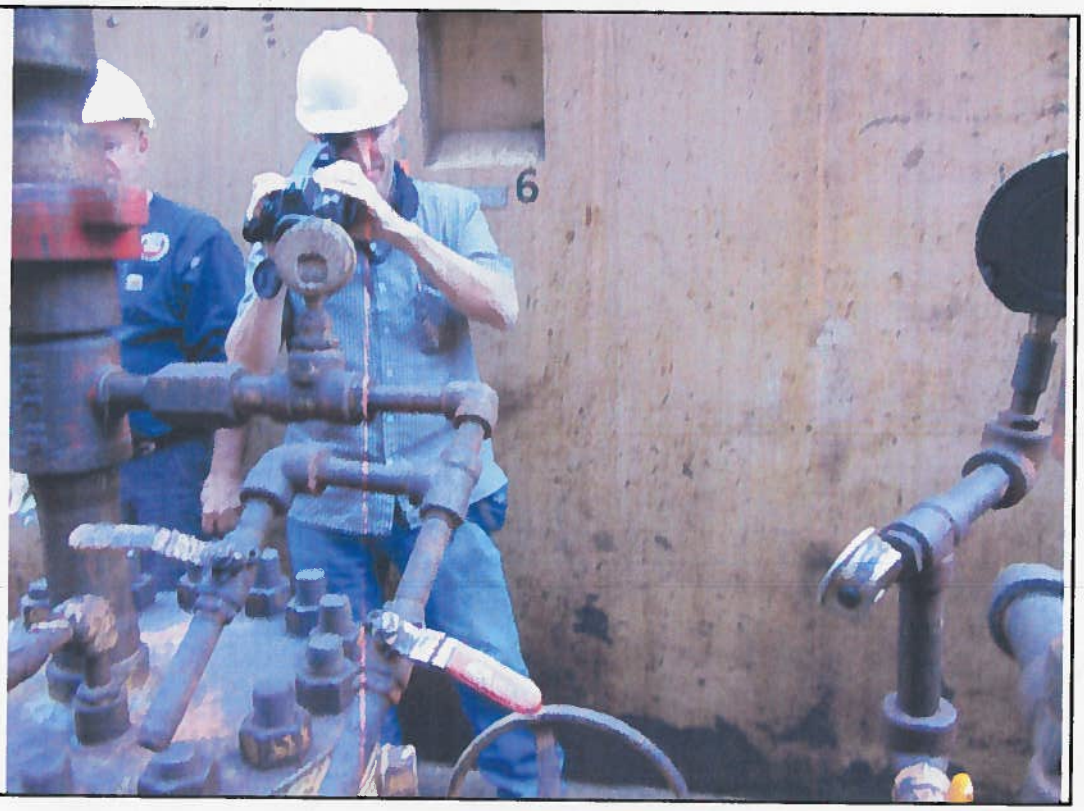
**Photo Description:**

Fire-Eye flame detector mounted in east end of well gallery

**Photo No.**
6

**Photo Description:**

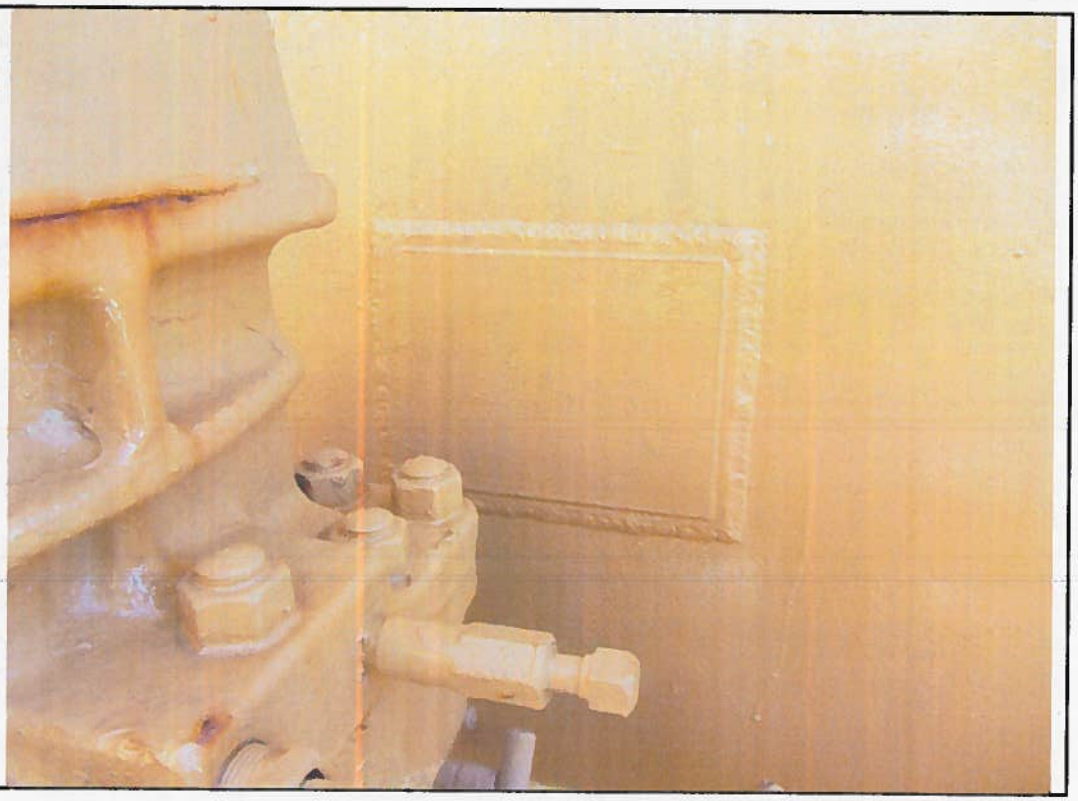
Dave Basinger using the FLIR camera at a producing wellhead



| | |
|---|---|
| **Photographer:** CAIN |   |
| **Photo No.** 7 | |
| **Photo Description:** West end of Free Water Knock Out (FWKO) | |

| | |
|---|---|
| **Photo No.** 8 |  |
| **Photo Description:** Name Plate for the FWKO. Note fabrication date is given as 1967, the capacity as 350 bbls and the Allowable Maximum Working Pressure as 55 psi | |

| | |
|---|---|
| **Photographer:** CAIN<br>**Photo No.** 9<br>**Photo Description:**<br>View south of two separators. |  |

| | |
|---|---|
| **Photo No.** 10<br>**Photo Description:**<br>Painted over nameplate on east separator depicted in Photo 9. Both separators' name plates were painted over in the manner. |  |

| | |
|---|---|
| **Photographer:** CAIN<br>**Photo No.** 11<br>**Photo Description:**<br>Paint flaking and surface pitting of bottom vessel on west separator |  |

| | |
|---|---|
| **Photo No.** 12<br>**Photo Description:**<br>View northeast of production area. Note fire monitors along south railing<br>(Note – Photo taken by J. Witul) |  |

**Photographer:** CAIN

**Photo No.** 13

**Photo Description:**

Top vessel of west separator. Note painted nameplate and pressure relief device.

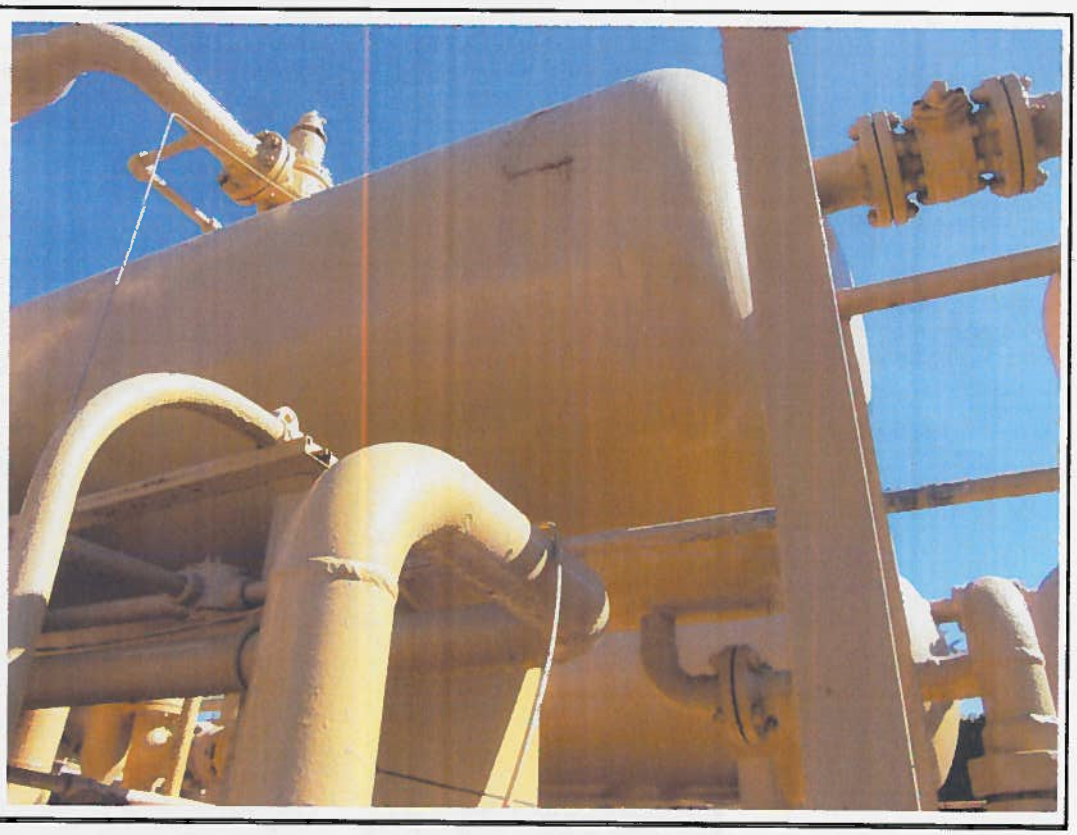


**Photo No.** 14

**Photo Description:**

Fire-Eye flame detector mounted at east end of production area

| | |
|---|---|
| **Photographer:** CAIN |  |
| **Photo No.** 15 | |
| **Photo Description:** Tank of emulsion breaker, one of 4 treatment chemicals located in the production area | |



| | |
|---|---|
| **Photo No.** 16 |  |
| **Photo Description:** Methane gas detector located outside of facility office | |

**Photographer:**
CAIN

**Photo No.**
17

**Photo Description:**

Produced water injection pump, located in pump house

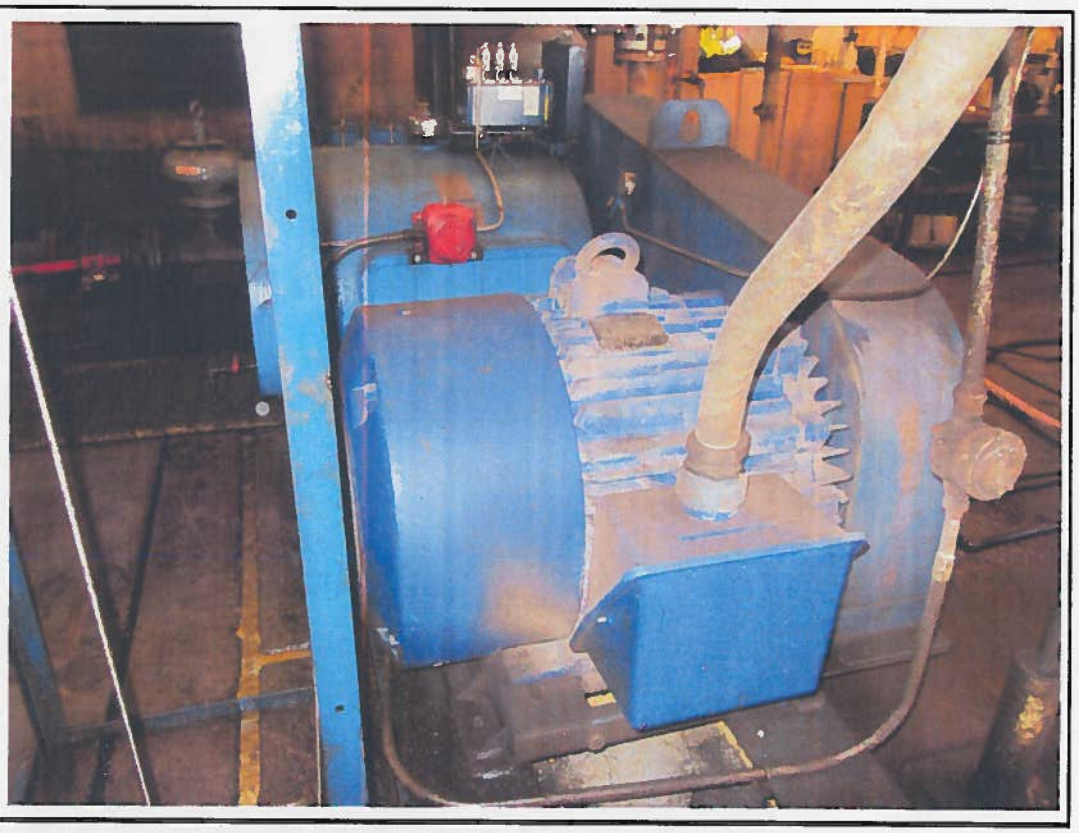
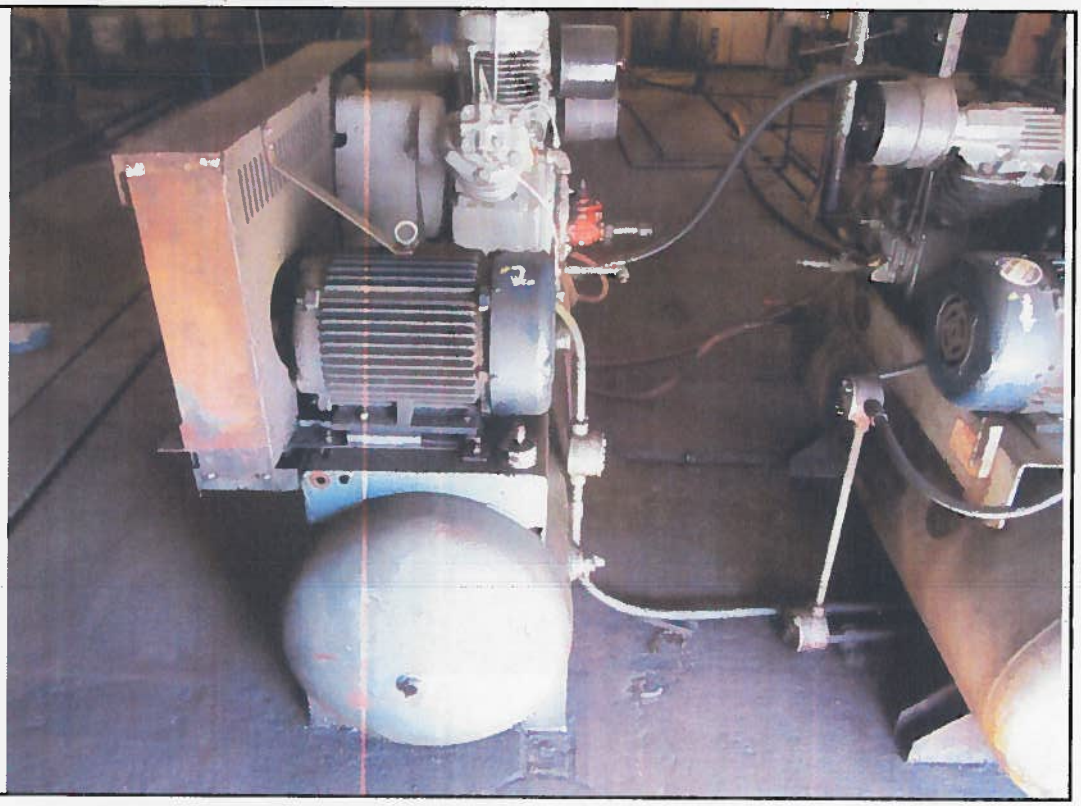


**Photo No.**
18

**Photo Description:**

2 natural gas compressors located in the pump house



| | |
|---|---|
| **Photographer:** CAIN |  |
| **Photo No.** 19 | |
| **Photo Description:** | |

| | |
|---|---|
| **Photo No.** 20 |   |
| **Photo Description:** ORANGE-SCENTED SOLVENT TOTE IN TANK FARM CONTAINMENT AREA (Note – Photo taken by J. Witul) | |

ATTACHMENT 7 –

Facility Documents

# Facility: AllenCo Energy (CERSID: 10456009)



Summary
Submittals
Reporting Requirements
Compliance
Notifications
Manage Facility
Change UPA
Location Map

## Facility Summary for CERS ID: 10456009

**Facility Name:** AllenCo Energy
**Business Name:** AllenCo Energy (Signal Hill, CA)
**CUPA:** Los Angeles City Fire Department

**Facility Information**

AllenCo Energy
814 W 23rd St
Los Angeles, CA 90007
(310) 505-8536

**Owner Information**

AllenCo Energy, Inc.
2109 Gundry Ave
Signal Hill, CA 90755
(582) 989-6100

**Primary Emergency Contact**

Tim Parker
Vice President
(562) 989-6100
(310) 505-8536 (24-hour)

**Secondary Emergency Contact**

Mick Beyer
Operations Manager
(562) 989-6100
(310) 505-9787 (24-hour)

**Environmental Contact**

Tim Parker
(562) 989-6100
tparker@allencoca.com
Mailing Address
2109 Gundry Ave
Signal Hill, CA 90755 United States

**Other Identifiers**

Local Facility ID: FA0028157
EPA ID: CAL000365174
Facility Regulator Key: No Facility Regulator Key in CERS
County: Los Angeles

**Submittal and Compliance Data**

Last Submittal Date: 9/11/2013 2:32 PM
Submitted Element Count: 4
Inspections: 0
Enforcements: 0

**Reporting Requirements**

| Submittal Element | Regulator | Reporting Requirement | Next Due Date |
|---|---|---|---|
| Facility Information | Los Angeles City Fire Department | Applicable | |
| Hazardous Materials Inventory | Los Angeles City Fire Department | Applicable | 11/25/2013 |
| Emergency Response and Training Plans | Los Angeles City Fire Department | Applicable | 10/28/2013 |
| Underground Storage Tanks | Los Angeles City Fire Department | Not Applicable | |
| Aboveground Petroleum Storage Act | Los Angeles City Fire Department | Applicable | |
| California Accidental Release Program | Los Angeles City Fire Department | Not Applicable | |
| Tiered Permitting | Los Angeles County Fire Department | Not Applicable | |
| Recyclable Materials Report | Los Angeles County Fire Department | Not Applicable | |
| Remote Waste Consolidation Site Annual Notification | Los Angeles County Fire Department | Not Applicable | |
| Hazardous Waste Tank Closure Certification | Los Angeles County Fire Department | Not Applicable | |

# Facility Submittal: AllenCo Energy (10456009)



## Submittal: Sep. 11, 2013 2:32 PM

### Facility Information

Accepted Oct. 24, 2013 Set Submittal Status

Note: You cannot change the status of this *Submittal Element* because you have insufficient privileges for Los Angeles City Fire Department.
Submitted for CERS ID 10456009 on 9/11/2013 2:32PM by *Michael Poppenheimer* of AllenCo Energy (Signal Hill, CA)
Submittal was ***Accepted*** on 10/24/2013 by *Marcus Look* for Los Angeles City Fire Department
Business Activities
Business Owner/Operator Identification

### Hazardous Materials Inventory

Not Accepted Oct. 24, 2013 Set Submittal Status

Note: You cannot change the status of this *Submittal Element* because you have insufficient privileges for Los Angeles City Fire Department.
Submitted for CERS ID 10456009 on 9/11/2013 2:32PM by *Michael Poppenheimer* of AllenCo Energy (Signal Hill, CA)
Submittal was ***Not Accepted*** on 10/24/2013 by *Marcus Look* for Los Angeles City Fire Department
Comments by regulator: You must include all chemicals that are over CUPA disclosure amount. You have solvent over 1000 gal and several other unidentified chemicals on site, please include all chemicals in your inventory disclosure. Your map must include all required information see sample map at this link https://www.lafdcupainfo.org/eee/images/SampleFacilityMap.gif
Hazardous Material Inventory
Site Map (Official Use Only): Upload Document(s)

### Emergency Response and Training Plans

Not Accepted Oct. 24, 2013 Set Submittal Status

Note: You cannot change the status of this *Submittal Element* because you have insufficient privileges for Los Angeles City Fire Department.
Submitted for CERS ID 10456009 on 9/11/2013 2:32PM by *Michael Poppenheimer* of AllenCo Energy (Signal Hill, CA)
Submittal was ***Not Accepted*** on 10/24/2013 by *Marcus Look* for Los Angeles City Fire Department
Comments by regulator: Consolidated Emergency Response/Contingency plan is missing local Unified Program Agency phone #. Training requirements are incomplete per Tilt 19, Section 2731. Missing mitigation, prevention and abatement of hazards to persons, property or the environment.
Emergency Response/Contingency Plan: Upload Document(s)
Employee Training Plan: Upload Document(s)

### Aboveground Petroleum Storage Act

Submitted Sep. 11, 2013 Set Submittal Status

Note: You cannot change the status of this *Submittal Element* because you have insufficient privileges for Los Angeles City Fire Department.
Submitted for CERS ID 10456009 on 9/11/2013 2:32PM by *Michael Poppenheimer* of AllenCo Energy (Signal Hill, CA)
Aboveground Petroleum Storage Act Documentation: Provided Elsewhere in CERS

Download EDT Regulator Facility Submittal XML Package

Submittal Search

# Hazardous Material Inventory: AllenCo Energy



You must complete a separate inventory page for each individual hazardous material and hazardous waste that you handle at your facility in an aggregate quantity subject to Hazardous Material Business Plan (HMBP) reporting requirements. The completed inventory must reflect all hazardous materials at your facility, reported **separately** for each building or outside storage area, with **separate** entries for unique occurrences of physical state, storage temperature, storage pressure. Where the aggregate quantities of some hazardous materials are below the HMBP threshold reporting quantity, report the general hazard class of the materials (e.g., "Misc. Flammable Liquids"), rather than the Common Name, and the aggregate quantity of all hazardous materials having this hazard class which individually are below the threshold reporting quantity.

## Submittal Element History

Submitted for CERS ID 10456009 on 9/11/2013 2:32PM by *Michael Poppenheimer* of AllenCo Energy (Signal Hill, CA)
Submittal was ***Not Accepted*** on 10/24/2013 by *Marcus Look* for Los Angeles City Fire Department
Comments by regulator: You must include all chemicals that are over CUPA disclosure amount. You have solvent over 1000 gal and several other unidentified chemicals on site, please include all chemicals in your inventory disclosure. Your map must include all required information see sample map at this link https://www.lafdcupainfo.org/eee/images/SampleFacilityMap.gif

Return to Submittal Inventory

## Chemical Identification and Physical Properties

**Chemical Name**
Crude Oil

**CERS Chemical Library ID**
-

**Common Name** **CAS Number**
Crude Oil 8002-05-9

**US EPA SRS ID**
425009

**Physical State**
Liquid

**Hazardous Material Type**
Pure

**Trade Secret**
No

## Chemical Hazard Classification

**EHS**
No

**Fire Code Hazard Classes (by priority)**
-

**Federal Hazard Categories**
Yes Fire
No Reactive
No Pressure Release
No Acute Health
No Chronic Health

**DOT Hazard Class**
-

**Radioactive**
No

**Curies**
-

**State Waste Code**
-
Lookup Code

## Inventory Location and Quantity

**Chemical Location**
Tank Farm

**Average Daily Amount** **Maximum Daily Amount**
3570 3570

**Units (Inventory)**
gallons

**Chemical Location Confidential EPCRA**
No

**Largest Container** **Annual Waste Amount**
10500 -

**Map# (Optional)** **Grid# (Optional)**
- -

**Days on Site**
-

## Inventory Storage Information

| | | | |
|---|---|---|---|
| Yes Aboveground Tank | No Can | No Box | No Tank Truck, Tank Wagon |
| No Underground Tank | No Carboy | No Cylinder | No Tank Car, Rail Car |
| No Tank Inside Building | No Silo | No Glass Bottle | No Other |
| No Steel Drum | No Fiber Drum | No Plastic Bottle | - |
| No Plastic/Non-Metallic Drum | No Bag | No Tote Bin | |

**Storage Pressure**
Ambient

**Storage Temperature**
Ambient

## Mixture Components

| Hazardous Component Name | CAS Number | % by Weight | EHS |
|---|---|---|---|
| - | - | - | - |
| - | - | - | - |
| - | - | - | - |
| - | - | - | - |
| - | - | - | - |

**Additional Mixture Components**
-

## Additional Chemical/Material Description

**Additional Chemical Description Information**
-

**Created By:** Michael Poppenheimer on 8/28/2013 3:04 PM
**Last Updated By:** Michael Poppenheimer on 8/28/2013 3:51 PM

Return to Submittal Inventory

# Hazardous Material Inventory: AllenCo Energy



**Submittal Element History**

Submitted for CERS ID 10456009 on 9/11/2013 2:32PM by *Michael Poppenheimer* of AllenCo Energy (Signal Hill, CA)
Submittal was ***Not Accepted*** on 10/24/2013 by *Marcus Look* for Los Angeles City Fire Department
Comments by regulator: You must include all chemicals that are over CUPA disclosure amount. You have solvent over 1000 gal and several other unidentified chemicals on site, please include all chemicals in your inventory disclosure. Your map must include all required information see sample map at this link https://www.lafdcupainfo.org/eee/images/SampleFacilityMap.gif

Return to Submittal

## Hazardous Materials Inventory (1)

**Not Accepted Oct. 24, 2013**

| | Common Name | CAS | Location | Max Daily Amount |
|---|---|---|---|---|
| View | Crude O | 8002-05-9 | Tank Farm | 3,570 gallons |

HMIS Matrix Report

Export To Excel

1 15 Page 1 of 1

Displaying items 1 - 1 of 1

# Site Map (Official Use Only): AllenCo Energy



## Supplemental Documentation

**Site Map (Official Use Only)**
You are only required to provide supplemental documentation as specified by your local regulator(s).

**Submittal Element History**

Submitted for CERS ID 10456009 on 9/11/2013 2:32PM by *Michael Poppenheimer* of AllenCo Energy (Signal Hill, CA)
Submittal was ***Not Accepted*** on 10/24/2013 by *Marcus Look* for Los Angeles City Fire Department
Comments by regulator: You must include all chemicals that are over CUPA disclosure amount. You have solvent over 1000 gal and several other unidentified chemicals on site, please include all chemicals in your inventory disclosure. Your map must include all required information see sample map at this link https://www.lafdcupainfo.org/eee/images/SampleFacilityMap.gif

Return to Submittal

**Unified Program Local Reporting Requirements for *Los Angeles City Fire Department***
Regulated facilities in this jurisdiction are required to report hazardous materials where quantities exceed the California Fire Code permit amounts as amended by LA City Fire. Refer to LAFD Std # 68 (http://lafd.org/prevention/pdfforms/88_hm_cat_dis_amnts.pdf) for a complete list of permit amounts. LAFD Fire Code Sec. 57.08.03

## Document Options

**Upload Document(s)**
Public Internet URL
Provided Elsewhere in CERS
Provided to Regulator
Stored at Facility
Exempt

## Document Upload(s)

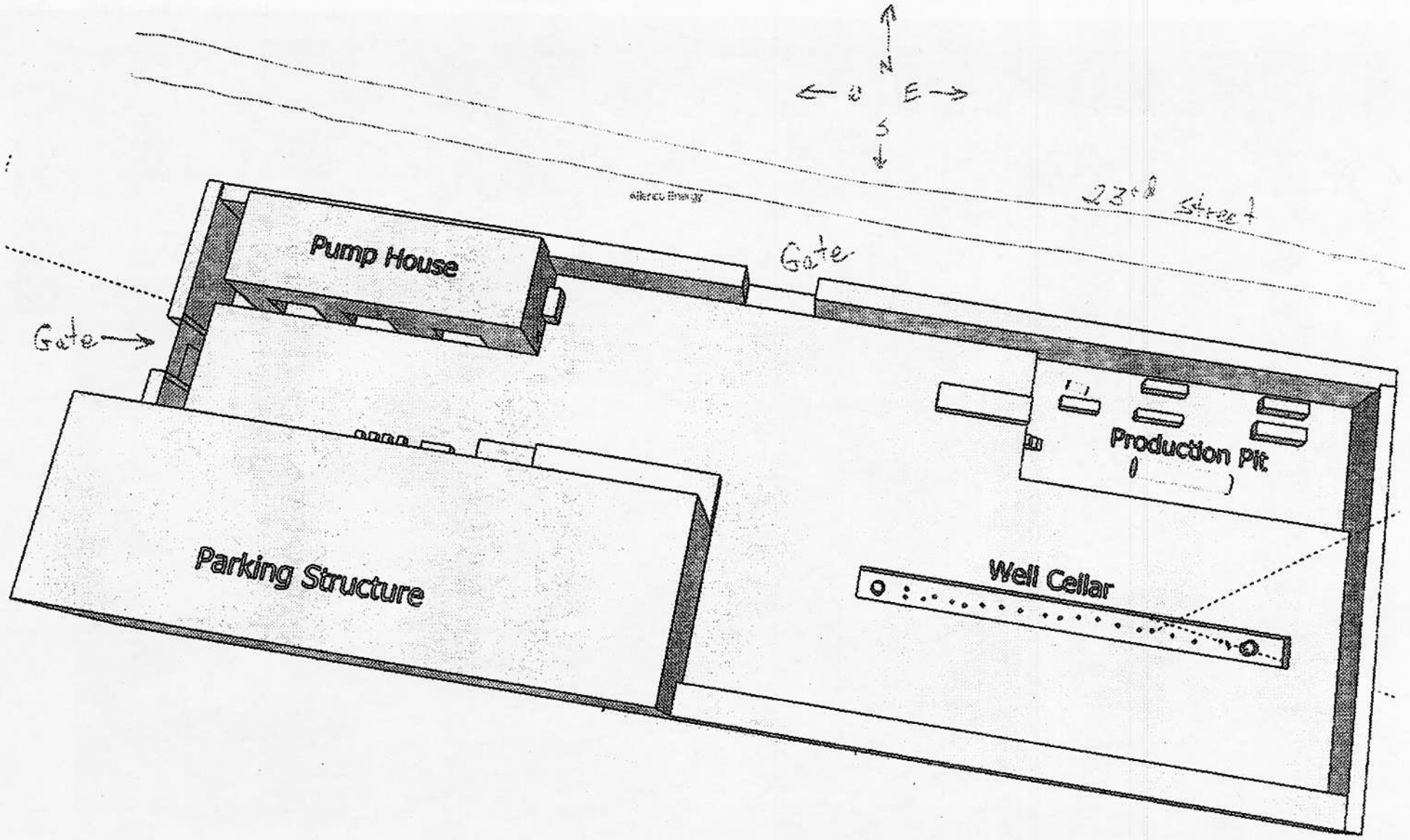
CERS Document Upload Policy

| Document Title | Date Authored |
|---|---|
| Annotated Site Map (Official Use Only) (Adobe PDF, 302 KB) | 9/11/2013 |

**Created By: Michael Poppenheimer on 9/11/2013 2:28 PM**
**Last Updated By: Michael Poppenheimer on 9/11/2013 2:28 PM**

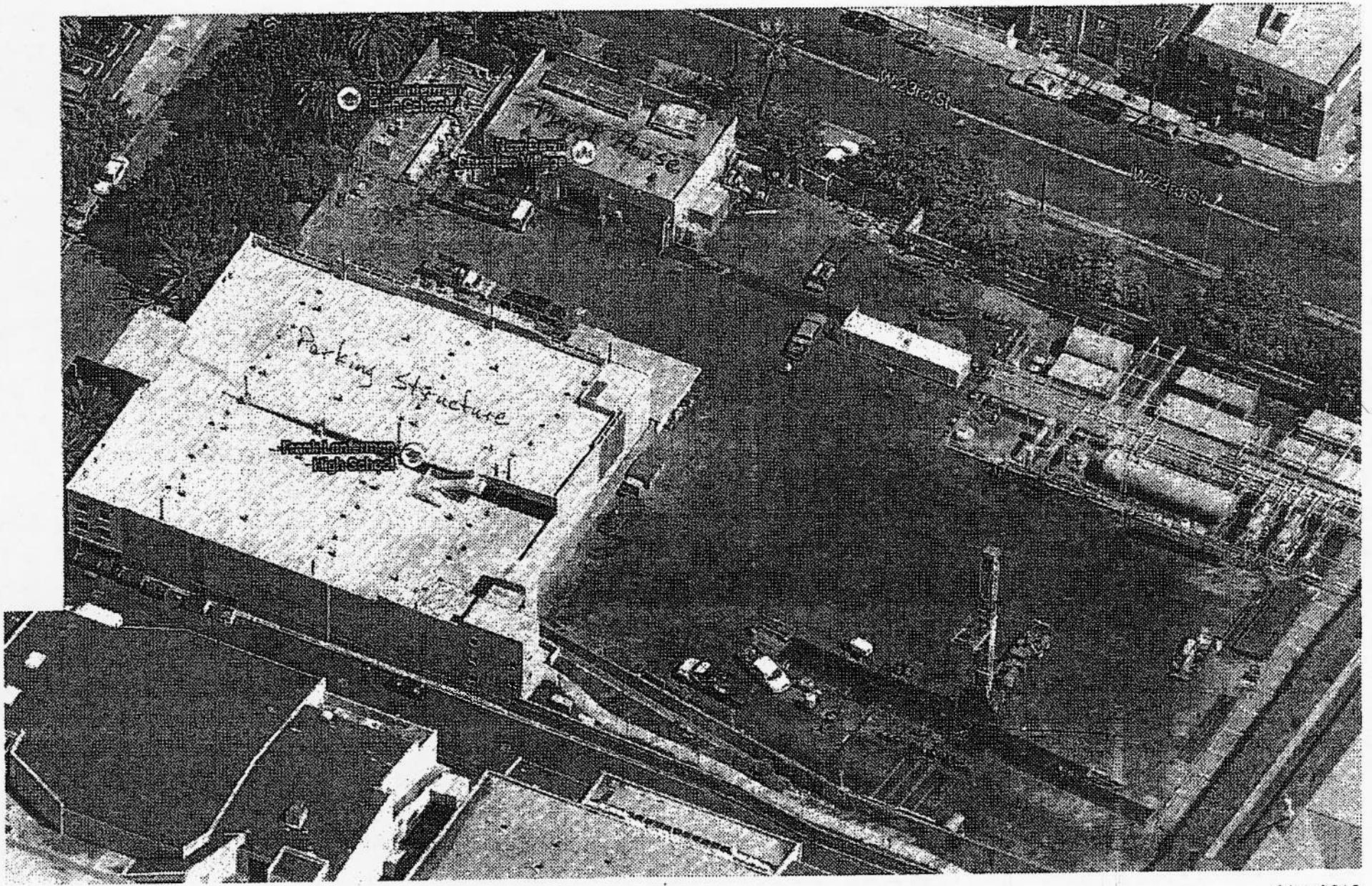
Back


CERS Help
Settings
Notifications


N
W
E
S
23rd Street
Gate
Pump House
Gate
Production Pit
Parking Structure
Well Cellar

Google

To see all the details that are visible on the screen, use the "Print" link next to the map.



DIVERSIFIED PROJECT SERVICES
INTERNATIONAL

# Customer: AllenCo
# AB 1960 Certified Inspection
# 12/14/2012

## Brine Water Tank #1
## AllenCo Energy Lease
## 814 West 23rd Street, Los Angeles, CA 90007
## MI121212

5001 E. Commercenter Drive. Suite 250, Bakersfield, CA, 93309
P: (661) 371-2800, F: (661-371-2801)
www.dpsiinc.com

# INDEX

**1.0 Executive Summary**

**2.0 Tank Summary**

**3.0 Inspection Personnel**

**4.0 Engineering Calculations**
**4.1 Shell Renewal Calculations**

**5.0 Shell Diagram**

**6.0 Pictures**

**7.0 GPS Location Map**

## 1.0 EXECUTIVE SUMMARY

**AllenCo has contracted Diversified Project Services International, Inc. to perform an In Service inspection on the tank located at 814 West 23rd, Los Angeles, CA 90007. This inspection was completed with the current criteria set forth in AB 1960 Title 14, Division 2, Chapter 4, Section 1773.4.**

**The primary goal of this inspection is to provide your company with an assessment of the equipment condition. The resultant report shall contain the required information to assess the general condition of the tank shell per AB 1960.**

**The Ultrasonic thickness readings and visual inspection methods were used to assess the shell plate condition. These methods were used externally and provided data relating to the present condition of the equipment.**

**The tank is a rectangular 1 course above ground storage tank that is currently in service. This tank is 8' H x 24' L x 8'W and equipped with a fixed roof. The following lists all findings and recommendations.**

**A total of 4 spot thickness readings were taken at the Thickness Monitoring Locations (TML) shown on the provided Shell Diagram (5.0). For all corrosion data based on the gathered thickness readings see Shell Renewal Calculations (4.0) The re-inspection date is based on AB 1960 Section 1773.4.a.**

**No visual external corrosion was noted on shell staves.**

RECOMENDATIONS:

**It is recommended if this tank is "Out Of Service" to be properly take this tank out of service as stated in AB1960 1773.5.(a).(4)**

**It is recommended to properly identify this tank with the operator's tank identification number as stated in AB1960 1773.3 (a).**

Inspector Signature: 

Brian Wilson API 653 Certification # 6051

## 2.0 TANK SUMMARY

### General

| | |
|---|---|
| **Tank Number/ID:** | **None** |
| **Tank Owner:** | **AllenCo** |
| **Construction Design:** | **API 12F (Shop welded - 90-750bbl)** |
| **Product:** | **Out of Service** |
| **Specific Gravity:** | **NA** |
| **Manufacturer:** | **unknown** |
| **Manufacture Date:** | **unknown** |
| **Data Plate Present:** | **None** |
| **NFPA Placard:** | **Yes** |

### Dimensions

| | **Round** | **Square** |
|---|---|---|
| **Diameter (ft.):** | | |
| **Height (ft.):** | | **8** |
| **Length (ft.):** | | **24** |
| **Width (ft.):** | | **8** |
| **Capacity (BBLS):** | | **273.55** |

### Design

| | |
|---|---|
| **Foundation:** | **Native Soil w/ Ringwall** |
| **Secondary Containment:** | **Concrete Containment** |
| **Leak Detection Barrier:** | **Yes** |
| **Cathodic Protection:** | **N/A** |
| **Ground Cable:** | **None** |
| **Bottom:** | **Butt Welded** |
| **Shell:** | **Butt Welded** |
| **Roof:** | **Butt Welded** |
| **Primary Seal:** | **None** |
| **Secondary Seal:** | **None** |

### Access

| | |
|---|---|
| **Internal Access:** | **Manway** |
| **Roof Access:** | **Vertical Ladder w/o Platform** |

### Coatings

| | |
|---|---|
| **Floor Internal:** | **Unknown** |
| **Shell Internal:** | **Unknown** |
| **Shell External:** | **Epoxy Coated** |
| **Roof: External:** | **Epoxy Coated** |

## 3.0 INSPECTION PERSONNEL AND QUALIFICATIONS:

**DPSI examination personnel are qualified and certified in accordance with DPSI's Quality Assurance Program, Procedure DPSI-WP-01. This procedure meets or exceeds the guidelines contained in the American Society for Nondestructive Testing's Recommended Practice, SNT-TC-1A.**

**Brian Wilson**
**API 653 Inspector**

**Ron Allen**
**Level II ASNT Technician**

**Jesse Kindrat**
**Technician Assistant**

**Shane Manning**
**Technician Assistant**

## 4.0 SHELL RENEWAL CALCULATIONS

**T prev = previous thickness measurement of shell course under consideration, as recorded at last inspection or nominal thickness if no previous thickness measurements, in inches.**

**T act = Minimum thickness measurement of the shell course under consideration, as recorded at the time of inspection, in inches.**

**T min = minimum required thickness of shell course, at the maximum allowable fill height, in inches.**

**Ca = Remaining corrosion allowance of the shell course under consideration, in inches.**

**Cr = Corrosion rate of the shell course under consideration, in inches per year.**

**RL = Estimated remaining life of the shell course under consideration, in years.**

**FHc = Calculated Fill Height = SEtact/2.6DG+1 (SEtact/4.6DG+.3) plus the total product height below the course of study, in feet.**

**Yt = Time span between thickness readings or age of the tank if nominal thickness is used for tprev, in years.**

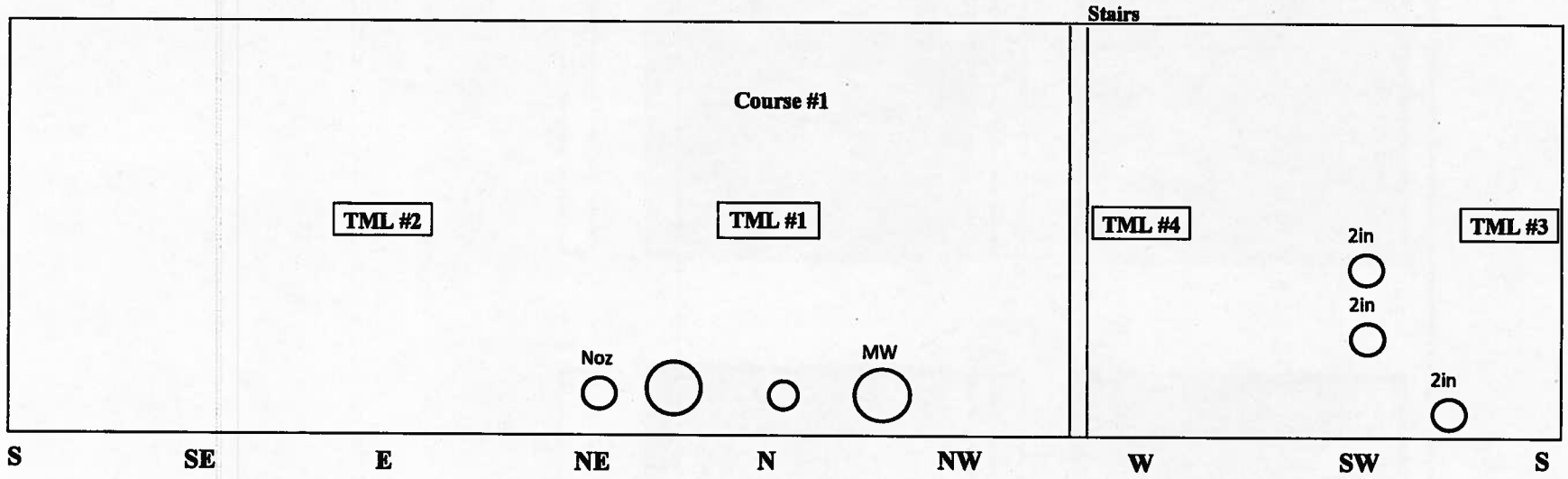
**Ca = T act - T min = Remaining Corrosion Allowance (inches)**
**Cr = T prev - T act / Yt = Corrosion Rate (inches per year)**
**RL = Ca / Cr = Remaining Life (years)**

| | | |
|---|---|---|
| **Date Inspected** | **12/14/2012** | |
| **Yt = Tank age (years)** | **20** | (Estimated) |
| **E = Efficiency** | **0.7** | |
| **D = Tank Diamter** | **-** | |
| **Y = Min. Yield Strength** | **30000** | ** 30000 lb./in² if unknown |
| **T = Min. Tensile Strength** | **55000** | ** 55000 lb./in² if unknown |
| **G = Product Gravity** | **1** | |

| Course | T prev | T act | T min | Ca | Cr | RL |
|---|---|---|---|---|---|---|
| Course 1 | 0.250 | 0.139 | 0.060 | 0.079 | 0.006 | 14.2 |

***** Next Inspection Due Date:** **December 14, 2017**

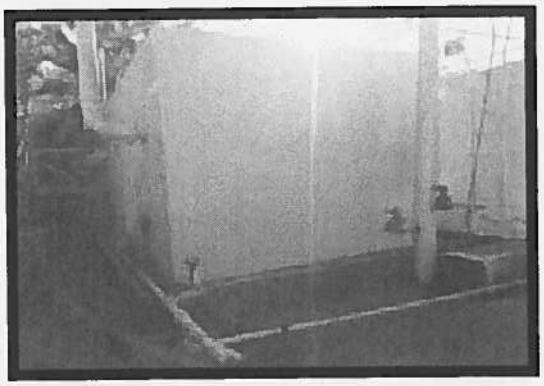
## 5.0 SHELL DIAGRAM AND THIKNESS DATA



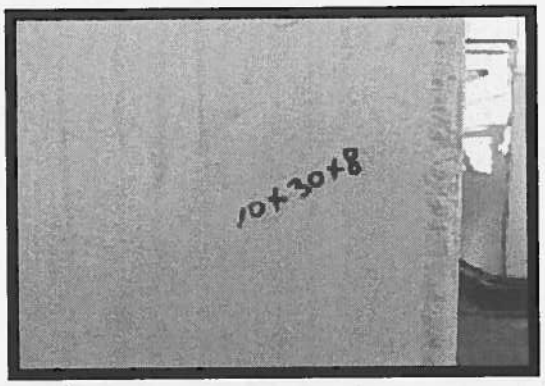

| Course #1 | |
|---|---|
| TML #1 | 0.257 |
| TML #2 | 0.253 |
| TML #3 | 0.247 |
| TML #4 | 0.139 |

| | |
|---|---|
| Min | 0.139 |
| Average | 0.224 |
| Max | 0.257 |

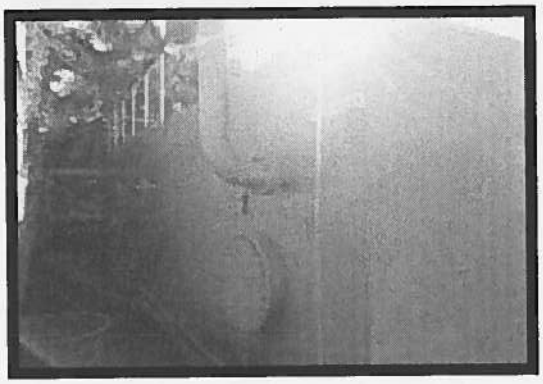
## 6.0 PICTURES



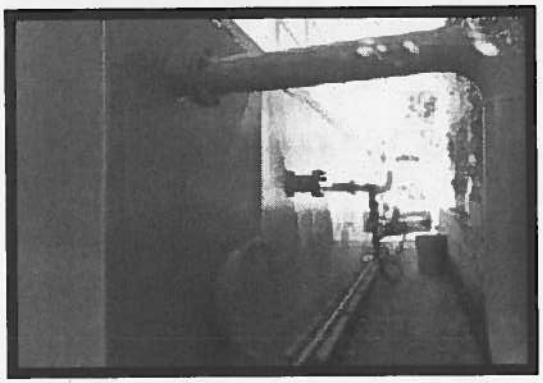
Vessel Overview




Tank Corner



Tank Wall



Tank Wall

## 7.0 GPS Location Map

**Address:** 814 West 23rd. Los Angeles, CA 90007

**GPS:** Latitude 34.072526
Longitude -118.27804

DIVERSIFIED PROJECT SERVICES
INTERNATIONAL

# AllenCo
# AB 1960 Certified Inspection
# 12/13/2012

## Crude Oil Tank #4
## AllenCo Energy Lease
## 814 West 23rd. Los Angeles, CA 90007
## MI121212

5001 E. Commercenter Drive, Suite 250, Bakersfield, CA, 93309
P: (661) 371-2800, F: (661-371-2801)
www.dpsiinc.com

# INDEX

**1.0 Executive Summary**

**2.0 Tank Summary**

**3.0 Inspection Personnel**

**4.0 Engineering Calculations**

- **4.1 Shell Renewal Calculations**
- **4.2 Shell Corrosion Rate**
- **4.3 Next Inspection Date**

**5.0 Shell Diagram**

**6.0 Pictures**

**7.0 GPS Location Map**

## 1.0 EXECUTIVE SUMMARY

**AllenCo has contracted Diversified Project Services International, Inc. to perform an In Service inspection on the lease located at 814 W. 23rd. St. Los Angeles, CA 90007. This inspection was completed with the current criteria set forth in AB 1960 Title 14, Division 2, Chapter 4, Section 1773.4.**

**The primary goal of this inspection is to provide your company with an assessment of the equipment condition. The resultant report shall contain the required information to assess the general condition of the tank shell per AB 1960.**

**The Ultrasonic thickness readings and visual inspection methods were used to assess the shell plate condition. These methods were used externally and provided data relating to the present condition of the equipment.**

**The tank is a rectangular, 1 course above ground storage tank that is currently in service. This tank is 8'H x 35'L x 10'W and equipped with a welded metal roof. The following lists all findings and recommendations.**

**A total of 4 spot thickness readings were taken at the Thickness Monitoring Locations (TML) shown on the provided Shell Diagram (5.0). For all corrosion data based on the gathered thickness readings see Shell Renewal Calculations (4.0). The re-inspection date is based on AB 1960 Section 1773.4.a.**

**No visual external corrosion was noted on shell staves.**

RECOMENDATIONS:

**It is recommended to properly identify this tank with the operator's tank identification number as stated in AB1960 1773.3 (a).**

Inspector Signature:_____

Brian Wilson API 653 Certification # 6051

## 2.0 TANK SUMMARY

### General

| | |
|---|---|
| **Tank Number:** | **None** |
| **Tank Owner:** | **AllenCo** |
| **Construction Design:** | **API 12F (Shop welded - 90-750bbl)** |
| **Product:** | **Oil** |
| **Specific Gravity:** | **0.79** |
| **Manufacturer:** | **Unknown** |
| **Manufacture Date:** | **Unknown** |
| **Data Plate Present:** | **None** |
| **NFPA Placard:** | **Yes** |

### Dimensions

| | Round | Square |
|---|---|---|
| **Diameter (ft.):** | | |
| **Height (ft.):** | | **8** |
| **Length (ft.):** | | **35** |
| **Width (ft.):** | | **10** |
| **Capacity (BBLS):** | | **498.67** |

### Design

| | |
|---|---|
| **Foundation:** | **Native Soil w/ Ringwall** |
| **Secondary Containment:** | **Concrete Containment** |
| **Leak Detection Barrier:** | **Yes** |
| **Cathodic Protection:** | **None** |
| **Ground Cable:** | **None** |
| **Bottom:** | **Butt Welded** |
| **Shell:** | **Butt Welded** |
| **Roof:** | **Butt Welded** |
| **Primary Seal:** | **None** |
| **Secondary Seal:** | **None** |

### Access

| | |
|---|---|
| **Internal Access:** | **Manway** |
| **Roof Access:** | **Vertical Ladder w/o Platform** |

### Coatings

| | |
|---|---|
| **Floor Internal:** | **Unknown** |
| **Shell Internal:** | **Unknown** |
| **Shell External:** | **Epoxy Coated** |
| **Roof: External:** | **Epoxy Coated** |

## 3.0 INSPECTION PERSONNEL AND QUALIFICATIONS:

**DPSI examination personnel are qualified and certified in accordance with DPSI's Quality Assurance Program, Procedure DPSI-WP-01. This procedure meets or exceeds the guidelines contained in the American Society for Nondestructive Testing's Recommended Practice, SNT-TC-1A.**

**Brian Wilson**
**API 653 Inspector**

**Ron Allen**
**Level II ASNT Technician**

**Jesse Kindrat**
**Technician Assistant**

**Shane Manning**
**Technician Assistant**

## 4.0 SHELL RENEWAL CALCULATIONS

**T prev = previous thickness measurement of shell course under consideration, as recorded at last inspection or nominal thickness if no previous thickness measurements, in inches.**

**T act = Minimum thickness measurement of the shell course under consideration, as recorded at the time of inspection, in inches.**

**T min = minimum required thickness of shell course, at the maximum allowable fill height, in inches.**

**Ca = Remaining corrosion allowance of the shell course under consideration, in inches.**

**Cr = Corrosion rate of the shell course under consideration, in inches per year.**

**RL = Estimated remaining life of the shell course under consideration, in years.**

**FHc = Calculated Fill Height = SEtact/2.6DG+1 (SEtact/4.6DG+.3) plus the total product height below the course of study, in feet.**

**Yt = Time span between thickness readings or age of the tank if nominal thickness is used for tprev, in years.**

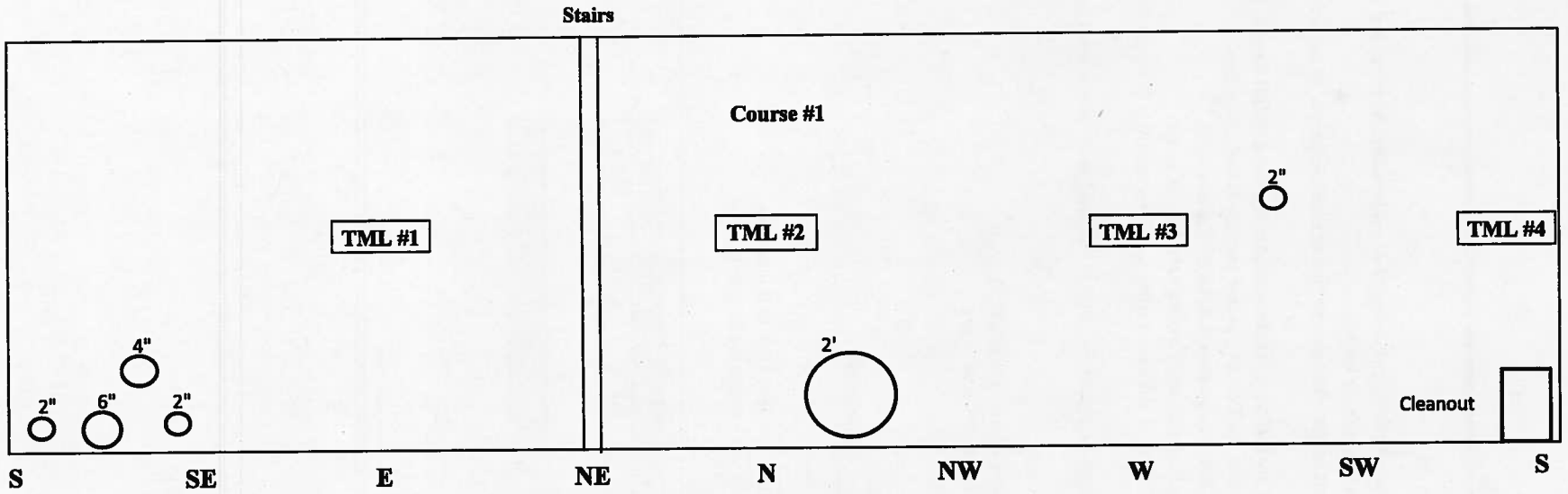
**Ca = T act - T min = Remaining Corrosion Allowance (inches)**
**Cr = T prev - T act / Yt = Corrosion Rate (inches per year)**
**RL = Ca / Cr = Remaining Life (years)**

| | | |
|---|---|---|
| **Date Inspected** | **12/14/2012** | |
| **Yt = Tank age (years)** | **20** | (Estimated) |
| **E = Efficiency** | **1** | |
| **D = Tank Diamter** | **-** | |
| **Y = Min. Yield Strength** | **30000** | ** 30000 lbf/in² if unknown |
| **T = Min. Tensile Strength** | **55000** | ** 55000 lbf/in² if unknown |
| **G = Product Garvity** | **0.79** | |

| Course | T prev | T act | T min | Ca | Cr | RL |
|---|---|---|---|---|---|---|
| Course 1 | 0.250 | 0.236 | 0.060 | 0.176 | 0.001 | 251.4 |

***** Next Inspection Due Date:** **December 14, 2017**

## 5.0 SHELL DIAGRAM AND THIKNESS DATA

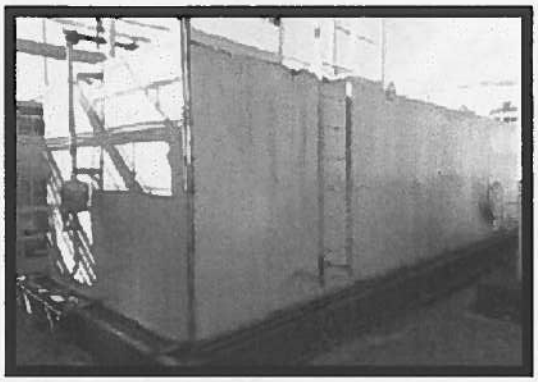



| Course #1 | |
|---|---|
| TML #1 | 0.236 |
| TML #4 | 0.241 |
| TML #7 | 0.237 |
| TML #10 | 0.240 |

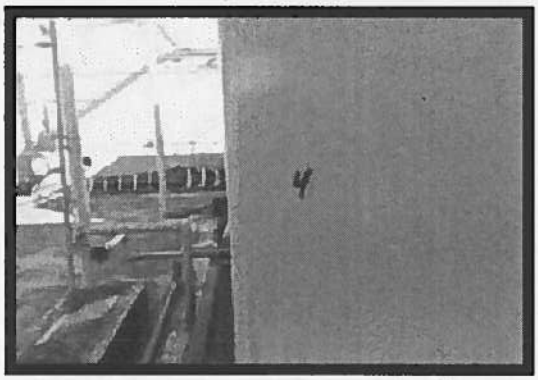
| | |
|---|---|
| Min | 0.236 |
| Average | 0.239 |
| Max | 0.241 |

## 6.0 PICTURES

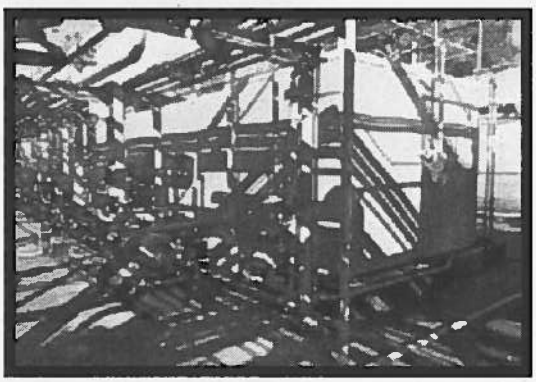
Tank Side View



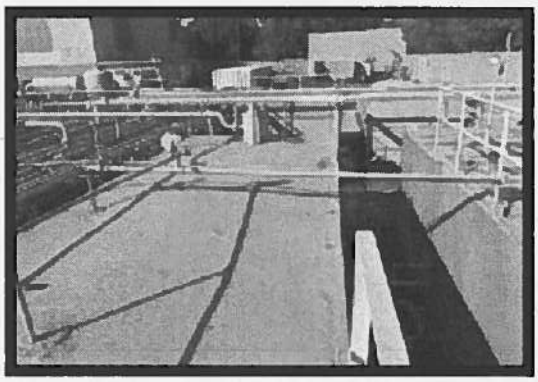
Tank Corner



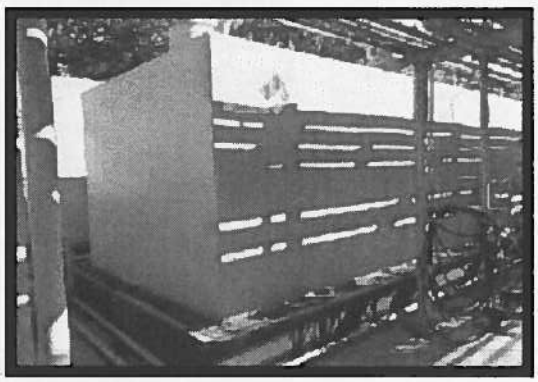

Tank



Tank



Roof View



NFPA Placard

## 7.0 GPS Location Map

**Address:** 814 West 23rd. Los Angeles, CA 90007

**GPS:** Latitude 34.072526
Longitude -118.278038

DIVERSIFIED PROJECT SERVICES
INTERNATIONAL

# AllenCo
# AB 1960 Certified Inspection
# 12/14/2012

## Crude Oil Tank #5
## AllenCo Energy Lease
## 814 West 23rd. Los Angeles, CA 90007
## MI121212

5001 E. Commercenter Drive, Suite 250, Bakersfield, CA, 93309
P: (661) 371-2800, F: (661-371-2801)
www.dpsiinc.com

# INDEX

**1.0 Executive Summary**

**2.0 Tank Summary**

**3.0 Inspection Personnel**

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- **4.2 Shell Corrosion Rate**
- **4.3 Next Inspection Date**

**5.0 Shell Diagram**

**6.0 Pictures**

**7.0 GPS Location Map**

## 1.0 EXECUTIVE SUMMARY

**AllenCo has contracted Diversified Project Services International, Inc. to perform an In Service inspection on the AllenCo Energy Lease located at 814 W. 23rd. St. Los Angeles, 90007. This inspection was completed with the current criteria set forth in AB 1960 Title 14, Division 2, Chapter 4, Section 1773.4.**

**The primary goal of this inspection is to provide your company with an assessment of the equipment condition. The resultant report shall contain the required information to assess the general condition of the tank shell per AB 1960.**

**The Ultrasonic thickness readings and visual inspection methods were used to assess the shell plate condition. These methods were used externally and provided data relating to the present condition of the equipment.**

**The tank is a rectangular, 1 course above ground storage tank that is currently in service. This tank is 8'H x 10'L x 10'W with a fixed welded roof. The following lists all findings and recommendations.**

**A total of 4 spot thickness readings were taken at the Thickness Monitoring Locations (TML) shown on the provided Shell Diagram (5.0). For all corrosion data based on the gathered thickness readings see Shell Renewal Calculations (4.0). The re-inspection date is based on AB 1960 Section 1773.4.a.**

**No visual external corrosion was noted.**

RECOMENDATIONS:

**It is recommended to properly identify this tank with the operator's tank identification number as stated in AB1960 1773.3 (a).**

Inspector Signature:_____

Brian Wilson API 653 Certification # 6051

## 2.0 TANK SUMMARY

### General

| | |
|---|---|
| **Tank Number:** | **None** |
| **Tank Owner:** | **AllenCo** |
| **Construction Design:** | **API 12F (Shop welded - 90-750bbl)** |
| **Product:** | **Crude Oil** |
| **Specific Gravity:** | **0.79** |
| **Manufacturer:** | **Unknown** |
| **Manufacture Date:** | **Unknown** |
| **Data Plate Present:** | **No** |
| **NFPA Placard:** | **Yes** |

### Dimensions

| | **Round** | **Square** |
|---|---|---|
| **Diameter (ft.):** | | |
| **Height (ft.):** | | **8** |
| **Length (ft.):** | | **10** |
| **Width (ft.):** | | **10** |
| **Capacity (BBLS):** | **0** | **142.48** |

### Design

| | |
|---|---|
| **Foundation:** | **Native Soil w/ Ringwall** |
| **Secondary Containment:** | **Concrete Containment** |
| **Leak Detection Barrier:** | **Yes** |
| **Cathodic Protection:** | **None** |
| **Ground Cable:** | **None** |
| **Bottom:** | **Butt Welded** |
| **Shell:** | **Butt Welded** |
| **Roof:** | **Butt Welded** |
| **Primary Seal:** | **None** |
| **Secondary Seal:** | **None** |

### Access

| | |
|---|---|
| **Internal Access:** | **Manway** |
| **Roof Access:** | **Vertical Ladder w/o Platform** |

### Coatings

| | |
|---|---|
| **Floor Internal:** | **Unknown** |
| **Shell Internal:** | **Unknown** |
| **Shell External:** | **Epoxy Coated** |
| **Roof: External:** | **Epoxy Coated** |

## 3.0 INSPECTION PERSONNEL AND QUALIFICATIONS:

**DPSI examination personnel are qualified and certified in accordance with DPSI's Quality Assurance Program, Procedure DPSI-WP-01. This procedure meets or exceeds the guidelines contained in the American Society for Nondestructive Testing's Recommended Practice, SNT-TC-1A.**

**Brian Wilson**
**API 653 Inspector**

**Ron Allen**
**Level II ASNT Technician**

**Jesse Kindrat**
**Technician Assistant**

**Shane Manning**
**Technician Assistant**

## 4.0 SHELL RENEWAL CALCULATIONS

**T prev = previous thickness measurement of shell course under consideration, as recorded at last inspection or nominal thickness if no previous thickness measurements, in inches.**

**T act = Minimum thickness measurement of the shell course under consideration, as recorded at the time of inspection, in inches.**

**T min = minimum required thickness of shell course, at the maximum allowable fill height, in inches.**

**Ca = Remaining corrosion allowance of the shell course under consideration, in inches.**

**Cr = Corrosion rate of the shell course under consideration, in inches per year.**

**RL = Estimated remaining life of the shell course under consideration, in years.**

**FHc = Calculated Fill Height = SEtact/2.6DG+1 (SEtact/4.6DG+.3) plus the total product height below the course of study, in feet.**

**Yt = Time span between thickness readings or age of the tank if nominal thickness is used for tprev, in years.**

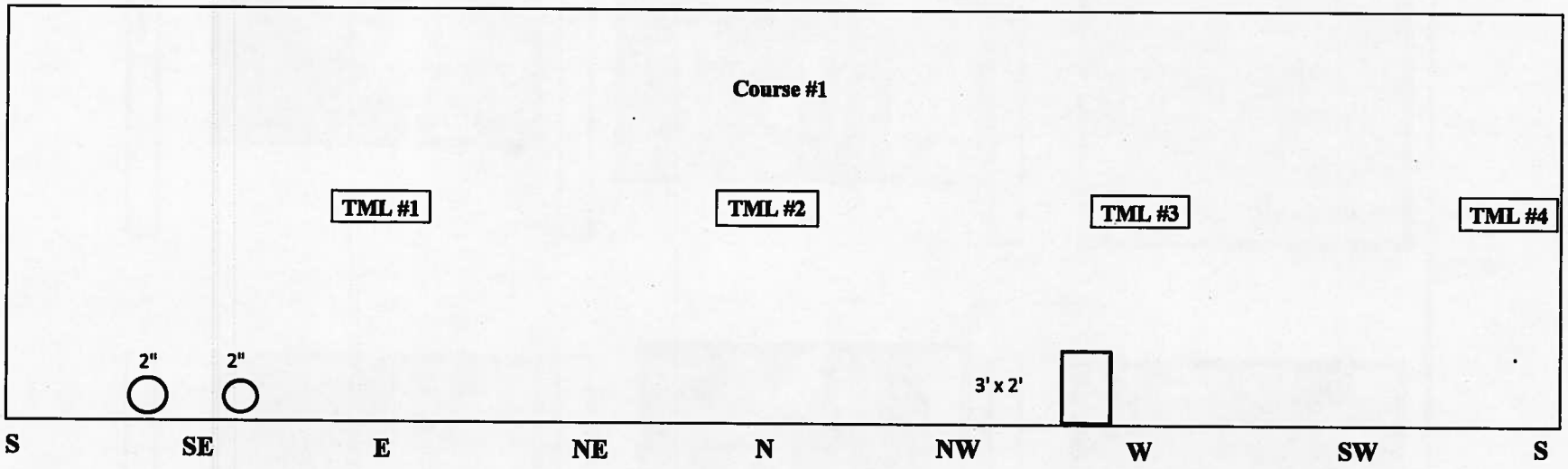
**Ca = T act - T min = Remaining Corrosion Allowance (inches)**
**Cr = T prev - T act / Yt = Corrosion Rate (inches per year)**
**RL = Ca / Cr = Remaining Life (years)**

| | | |
|---|---|---|
| **Date Inspected** | **12/14/2012** | |
| **Yt = Tank age (years)** | **20** | (Estimated) |
| **E = Efficiency** | **1** | |
| **D = Tank Diamter** | **-** | |
| **Y = Min. Yield Strength** | **30000** | ** 30000 lbf/in² if unknown |
| **T = Min. Tensile Strength** | **55000** | ** 55000 lbf/in² if unknown |
| **G = Product Garvity** | **0.79** | |

| Course | T prev | T act | T min | Ca | Cr | RL |
|---|---|---|---|---|---|---|
| Course 1 | 0.250 | 0.228 | 0.060 | 0.168 | 0.001 | 152.7 |

***** Next Inspection Due Date:** **December 14, 2017**

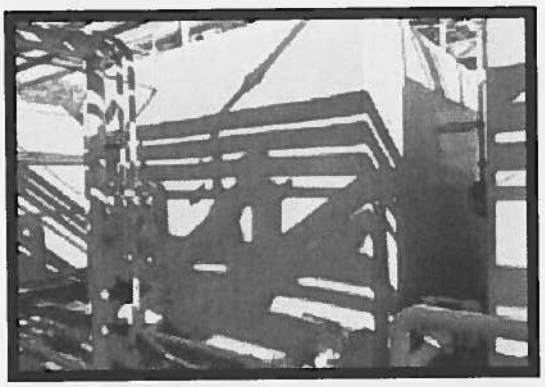
## 5.0 SHELL DIAGRAM AND THIKNESS DATA



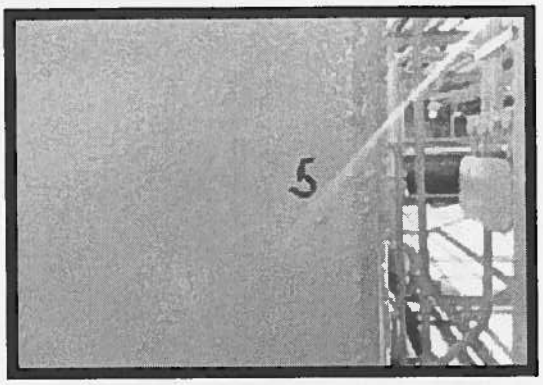

| Course #1 | |
|---|---|
| TML #1 | 0.243 |
| TML #2 | 0.235 |
| TML #3 | 0.330 |
| TML #4 | 0.228 |

| | |
|---|---|
| Min | 0.228 |
| Average | 0.259 |
| Max | 0.330 |

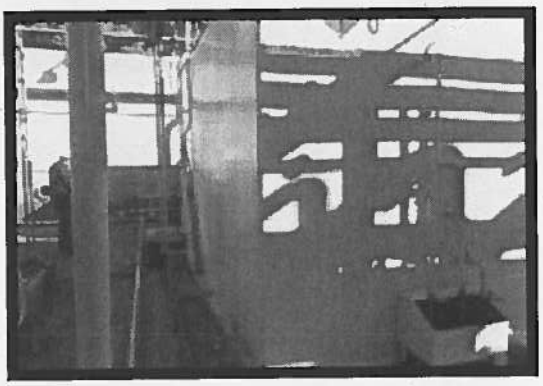
## 6.0 PICTURES



Tank Side

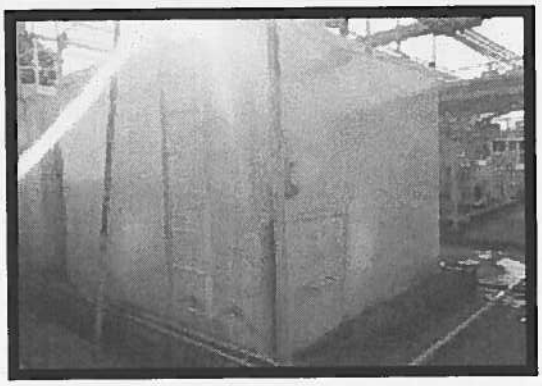



Close-up of Tank

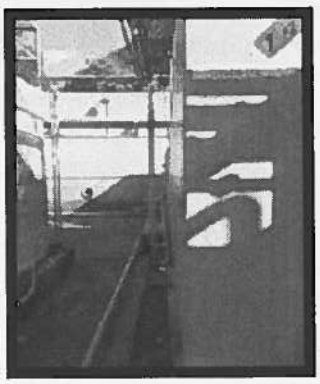


Corner of Tank

Tank Corner



Tank Corner

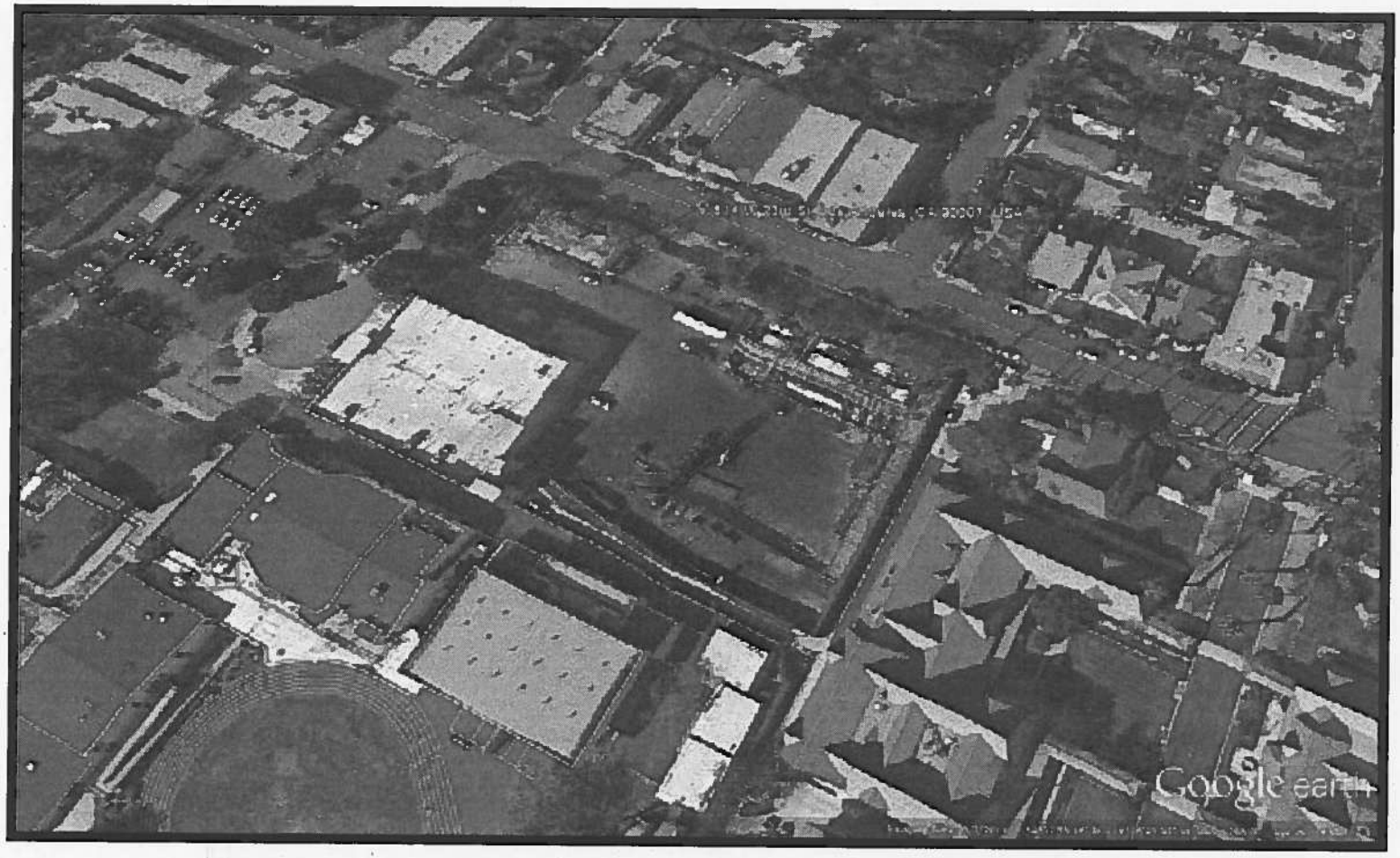


Tank Corner

## 7.0 GPS Location Map

**Address:** 814 West 23rd. Los Angeles, CA 90007

**GPS:** Latitude 34.072526
Longitude -118.278038



DIVERSIFIED PROJECT SERVICES
INTERNATIONAL

# AllenCo
# AB 1960 Certified Inspection
# 12/14/2012

## Crude Oil Tank #6
## AllenCo Energy Lease
## 814 West 23rd. Los Angeles, CA 90007
## MI121212

5001 E. Commercenter Drive, Suite 250, Bakersfield, CA, 93309
P: (661) 371-2800, F: (661-371-2801)
www.dpsiinc.com

# INDEX

**1.0 Executive Summary**

**2.0 Tank Summary**

**3.0 Inspection Personnel**

**4.0 Engineering Calculations**

- **4.1 Shell Renewal Calculations**
- **4.2 Shell Corrosion Rate**
- **4.3 Next Inspection Date**

**5.0 Shell Diagram**

**6.0 Pictures**

**7.0 GPS Location Map**

## 1.0 EXECUTIVE SUMMARY

**AllenCo has contracted Diversified Project Services International, Inc. to perform an In Service inspection on the located at 814 W. 23rd. St. Los Angeles, CA 90007. This inspection was completed with the current criteria set forth in AB 1960 Title 14, Division 2, Chapter 4, Section 1773.4.**

**The primary goal of this inspection is to provide your company with an assessment of the equipment condition. The resultant report shall contain the required information to assess the general condition of the tank shell per AB 1960.**

**The Ultrasonic thickness readings and visual inspection methods were used to assess the shell plate condition. These methods were used externally and provided data relating to the present condition of the equipment.**

**The tank is a rectangular, 1 course above ground storage tank that is currently in service. This tank is 8'H x 20'L x 10'W and equipped with a welded fixed roof. The following lists all findings and recommendations.**

**A total of 4 spot thickness readings were taken at the Thickness Monitoring Locations (TML) shown on the provided Shell Diagram (5.0). For all corrosion data based on the gathered thickness readings see Shell Renewal Calculations (4.0). The re-inspection date is based on AB 1960 Section 1773.4.a.**

**No visual external corrosion was noted.**

RECOMENDATIONS:

**It is recommended to properly identify this tank with the operator's tank identification number as stated in AB1960 1773.3 (a).**

Inspector Signature: 

Brian Wilson API 653 Certification # 6051

## 2.0 TANK SUMMARY

### General

| | |
|---|---|
| **Tank Number:** | **None** |
| **Tank Owner:** | **AllenCo** |
| **Construction Design:** | **API 12F (Shop welded - 90-750bbl)** |
| **Product:** | **Crude Oil** |
| **Specific Gravity:** | **0.79** |
| **Manufacturer:** | **Unknown** |
| **Manufacture Date:** | **Unknown** |
| **Data Plate Present:** | **None** |
| **NFPA Placard:** | **Yes** |

### Dimensions

| | **Round** | **Square** |
|---|---|---|
| **Diameter (ft.):** | | |
| **Height (ft.):** | | **8** |
| **Length (ft.):** | | **20** |
| **Width (ft.):** | | **10** |
| **Capacity (BBLS):** | | **284.95** |

### Design

| | |
|---|---|
| **Foundation:** | **Native Soil w/ Ringwall** |
| **Secondary Containment:** | **Concrete Containment** |
| **Leak Detection Barrier:** | **Yes** |
| **Cathodic Protection:** | **None** |
| **Ground Cable:** | **None** |
| **Bottom:** | **Butt Welded** |
| **Shell:** | **Butt Welded** |
| **Roof:** | **Butt Welded** |
| **Primary Seal:** | **None** |
| **Secondary Seal:** | **None** |

### Access

| | |
|---|---|
| **Internal Access:** | **Manway** |
| **Roof Access:** | **Vertical Ladder w/o Platform** |

### Coatings

| | |
|---|---|
| **Floor Internal:** | **Unknown** |
| **Shell Internal:** | **Unknown** |
| **Shell External:** | **Epoxy Coated** |
| **Roof: External:** | **Epoxy Coated** |

## 3.0 INSPECTION PERSONNEL AND QUALIFICATIONS:

**DPSI examination personnel are qualified and certified in accordance with DPSI's Quality Assurance Program, Procedure DPSI-WP-01. This procedure meets or exceeds the guidelines contained in the American Society for Nondestructive Testing's Recommended Practice, SNT-TC-1A.**

**Brian Wilson**
**API 653 Inspector**

**Ron Allen**
**Level II ASNT Technician**

**Jesse Kindrat**
**Technician Assistant**

**Shane Manning**
**Technician Assistant**

## 4.0 SHELL RENEWAL CALCULATIONS

**T prev = previous thickness measurement of shell course under consideration, as recorded at last inspection or nominal thickness if no previous thickness measurements, in inches.**

**T act = Minimum thickness measurement of the shell course under consideration, as recorded at the time of inspection, in inches.**

**T min = minimum required thickness of shell course, at the maximum allowable fill height, in inches.**

**Ca = Remaining corrosion allowance of the shell course under consideration, in inches.**

**Cr = Corrosion rate of the shell course under consideration, in inches per year.**

**RL = Estimated remaining life of the shell course under consideration, in years.**

**FHc = Calculated Fill Height = SEtact/2.6DG+1 (SEtact/4.6DG+.3) plus the total product height below the course of study, in feet.**

**Yt = Time span between thickness readings or age of the tank if nominal thickness is used for tprev, in years.**

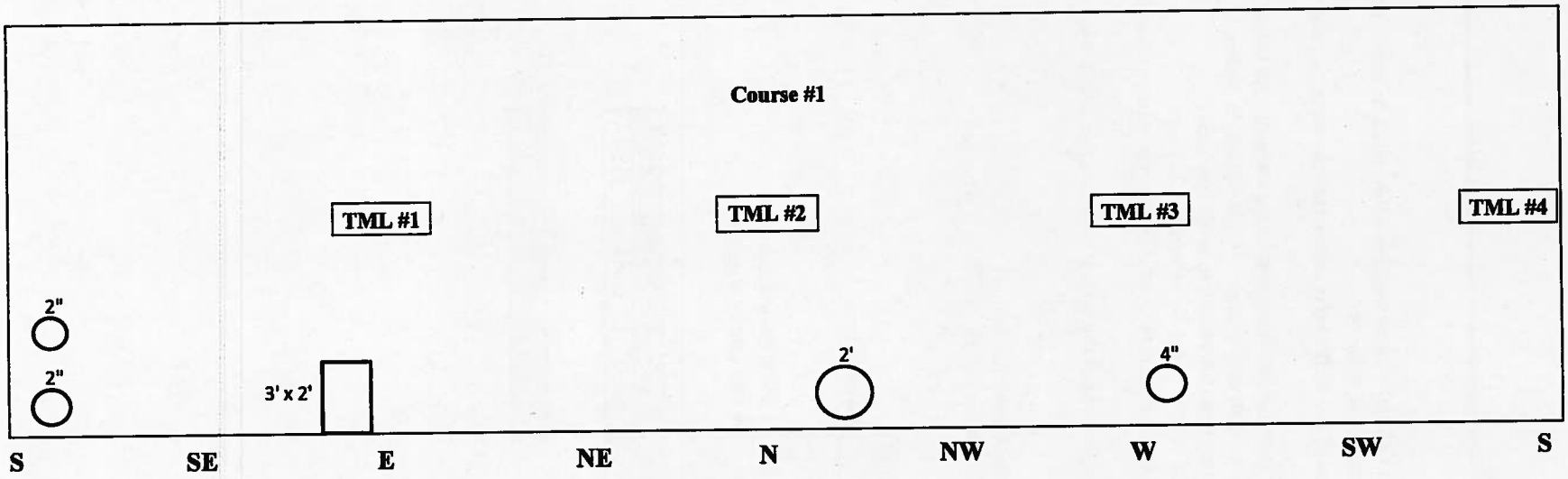
**Ca = T act - T min = Remaining Corrosion Allowance (inches)**
**Cr = T prev - T act / Yt = Corrosion Rate (inches per year)**
**RL = Ca / Cr = Remaining Life (years)**

| | | |
|---|---|---|
| **Date Inspected** | **12/14/2012** | |
| **Yt = Tank age (years)** | **20** | (Estimated) |
| **E = Efficiency** | **1** | |
| **D = Tank Diamter** | **-** | |
| **Y = Min. Yield Strength** | **30000** | ** 30000 lbf/in² if unknown |
| **T = Min. Tensile Strength** | **55000** | ** 55000 lbf/in² if unknown |
| **G = Product Garvity** | **0.79** | |

| Course | T prev | T act | T min | Ca | Cr | RL |
|---|---|---|---|---|---|---|
| Course 1 | 0.281 | 0.252 | 0.060 | 0.192 | 0.001 | 132.4 |

***** Next Inspection Due Date:** **December 14, 2017**

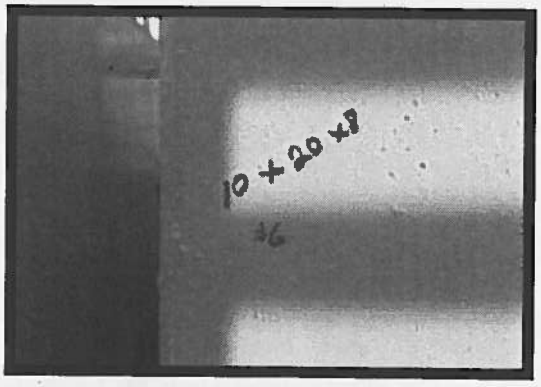
## 5.0 SHELL DIAGRAM AND THIKNESS DATA



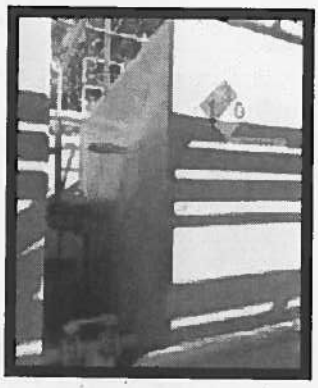

| Course #1 | |
|---|---|
| TML #1 | 0.262 |
| TML #2 | 0.275 |
| TML #3 | 0.268 |
| TML #4 | 0.252 |

| | |
|---|---|
| Min | 0.252 |
| Average | 0.264 |
| Max | 0.275 |

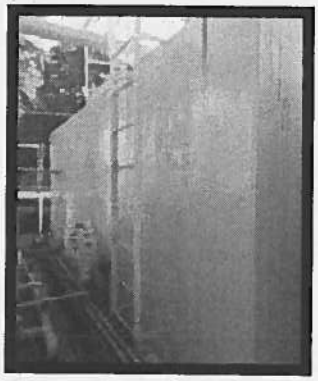
## 6.0 PICTURES



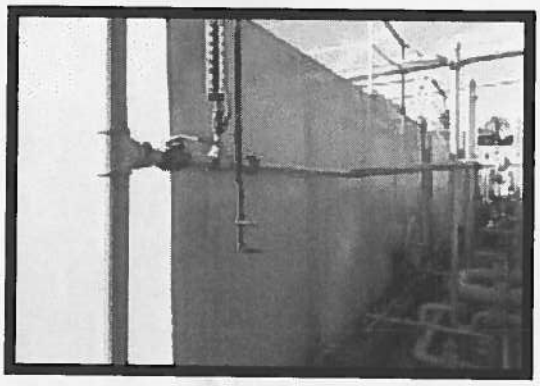

Side of Tank



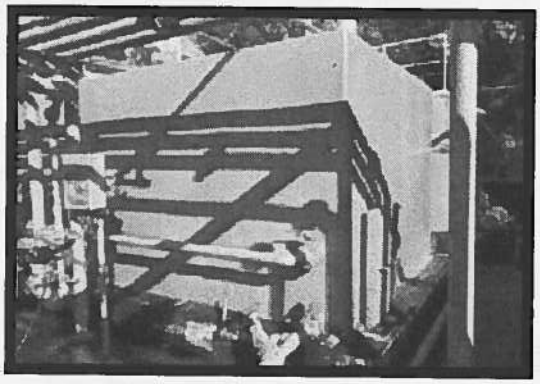
NFPA Placard



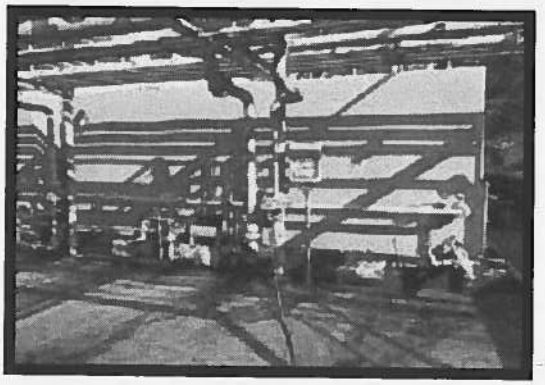
Tank Side



Tank Side



Tank Side



Tank Side

## 7.0 GPS Location Map

**Address:** 814 West 23rd. Los Angeles, CA 90007

**GPS:** Latitude 34.072526
Longitude -118.278038

DIVERSIFIED PROJECT SERVICES
INTERNATIONAL

# AllenCo
# AB 1960 Certified Inspection
# 12/14/2012

## Injection Water Tank #2
## AllenCo Energy Lease
## 814 West 23rd. Los Angeles, CA 90007
## MI121212

5001 E. Commercenter Drive, Suite 250, Bakersfield, CA. 93309
P: (661) 371-2800, F: (661-371-2801)
www.dpsiinc.com

# INDEX

**1.0 Executive Summary**

**2.0 Tank Summary**

**3.0 Inspection Personnel**

**4.0 Engineering Calculations**

- **4.1 Shell Renewal Calculations**
- **4.2 Shell Corrosion Rate**
- **4.3 Next Inspection Date**

**5.0 Shell Diagram**

**6.0 Pictures**

**7.0 GPS Location Map**

## 1.0 EXECUTIVE SUMMARY

**AllenCo has contracted Diversified Project Services International, Inc. to perform an In Service inspection on the lease located at 814 W. 23rd St. los Angeles, CA 90007. This inspection was completed with the current criteria set forth in AB 1960 Title 14, Division 2, Chapter 4, Section 1773.4.**

**The primary goal of this inspection is to provide your company with an assessment of the equipment condition. The resultant report shall contain the required information to assess the general condition of the tank shell per AB 1960.**

**The Ultrasonic thickness readings and visual inspection methods were used to assess the shell plate condition. These methods were used externally and provided data relating to the present condition of the equipment.**

**The tank is a rectangular, 1 course above ground storage tank that is currently in service. This tank is 8'H x 30'L x 10'W equipped with a fixed welded roof. The following lists all findings and recommendations.**

**A total of 4 spot thickness readings were taken at the Thickness Monitoring Locations (TML) shown on the provided Shell Diagram (5.0). For all corrosion data based on the gathered thickness readings see Shell Renewal Calculations (4.0) . The re-inspection date is based on AB 1960 Section 1773.4.a.**

**No visual external corrosion was noted on shell staves.**

RECOMENDATIONS:

**It is recommended to properly identify this tank with the operator's tank identification number as stated in AB1960 1773.3 (a).**

Inspector Signature: 

Brian Wilson API 653 Certification # 6051

## 2.0 TANK SUMMARY

### General

| | |
|---|---|
| **Tank Number:** | None |
| **Tank Owner:** | AllenCo |
| **Construction Design:** | API 12F (Shop welded - 90-750bbl) |
| **Product:** | Injection Water |
| **Specific Gravity:** | 1.0 |
| **Manufacturer:** | Unknown |
| **Manufacture Date:** | Unknown |
| **Data Plate Present:** | None |
| **NFPA Placard:** | Yes |

### Dimensions

| | Round | Square |
|---|---|---|
| **Diameter (ft.):** | | |
| **Height (ft.):** | | 8 |
| **Length (ft.):** | | 30 |
| **Width (ft.):** | | 10 |
| **Capacity (BBLS):** | 0 | 427.43 |

### Design

| | |
|---|---|
| **Foundation:** | Native Soil w/o Ringwall |
| **Secondary Containment:** | Concrete Containment |
| **Leak Detection Barrier:** | Yes |
| **Cathodic Protection:** | None |
| **Ground Cable:** | None |
| **Bottom:** | Butt Welded |
| **Shell:** | Butt Welded |
| **Roof:** | Butt Welded |
| **Primary Seal:** | None |
| **Secondary Seal:** | None |

### Access

| | |
|---|---|
| **Internal Access:** | Manway |
| **Roof Access:** | Vertical Ladder w/o Platform |

### Coatings

| | |
|---|---|
| **Floor Internal:** | Unknown |
| **Shell Internal:** | Unknown |
| **Shell External:** | Epoxy Coated |
| **Roof: External:** | Epoxy Coated |

## 3.0 INSPECTION PERSONNEL AND QUALIFICATIONS:

**DPSI examination personnel are qualified and certified in accordance with DPSI's Quality Assurance Program, Procedure DPSI-WP-01. This procedure meets or exceeds the guidelines contained in the American Society for Nondestructive Testing's Recommended Practice, SNT-TC-1A.**

**Brian Wilson**
**API 653 Inspector**

**Ron Allen**
**Level II ASNT Technician**

**Jesse Kindrat**
**Technician Assistant**

**Shane Manning**
**Technician Assistant**

## 4.0 SHELL RENEWAL CALCULATIONS

**T prev = previous thickness measurement of shell course under consideration, as recorded at last inspection or nominal thickness if no previous thickness measurements, in inches.**

**T act = Minimum thickness measurement of the shell course under consideration, as recorded at the time of inspection, in inches.**

**T min = minimum required thickness of shell course, at the maximum allowable fill height, in inches.**

**Ca = Remaining corrosion allowance of the shell course under consideration, in inches.**

**Cr = Corrosion rate of the shell course under consideration, in inches per year.**

**RL = Estimated remaining life of the shell course under consideration, in years.**

**FHc = Calculated Fill Height = SEtact/2.6DG+1 (SEtact/4.6DG+.3) plus the total product height below the course of study, in feet.**

**Yt = Time span between thickness readings or age of the tank if nominal thickness is used for tprev, in years.**

**Ca = T act - T min = Remaining Corrosion Allowance (inches)**

**Cr = T prev - T act / Yt = Corrosion Rate (inches per year)**

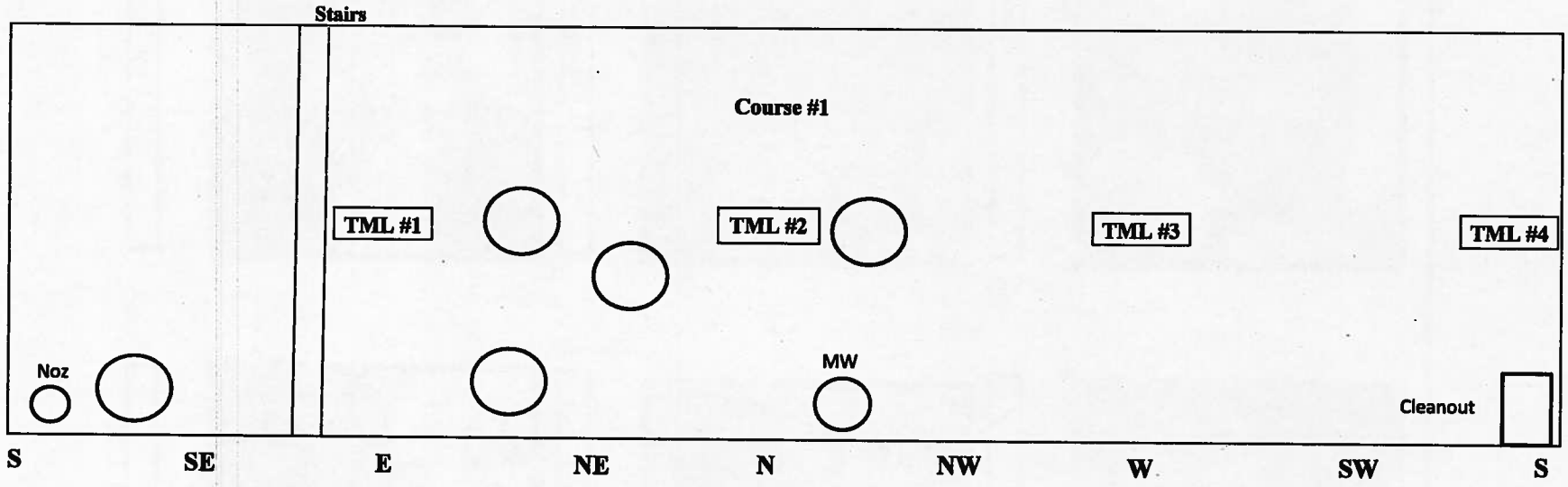
**RL = Ca / Cr = Remaining Life (years)**

| | | |
|---|---|---|
| **Date Inspected** | **12/14/2012** | |
| **Yt = Tank age (years)** | **20** | (Estimated) |
| **E = Efficiency** | **1** | |
| **D = Tank Diamter** | **-** | |
| **Y = Min. Yield Strength** | **30000** | ** 30000 lbf/in² if unknown |
| **T = Min. Tensile Strength** | **55000** | ** 55000 lbf/in² if unknown |
| **G = Product Garvity** | **1** | |

| Course | T prev | T act | T min | Ca | Cr | RL |
|---|---|---|---|---|---|---|
| Course 1 | 0.281 | 0.257 | 0.060 | 0.197 | 0.001 | 164.2 |

***** Next Inspection Due Date:** **December 14, 2017**

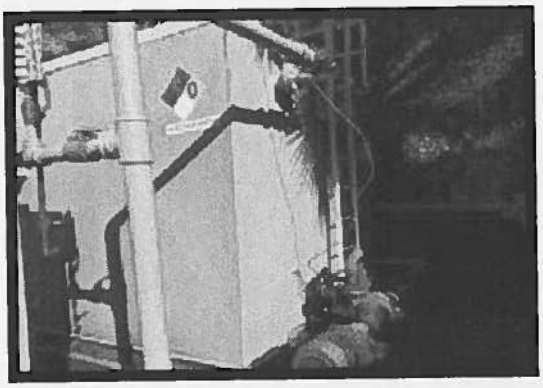
## 5.0 SHELL DIAGRAM AND THIKNESS DATA



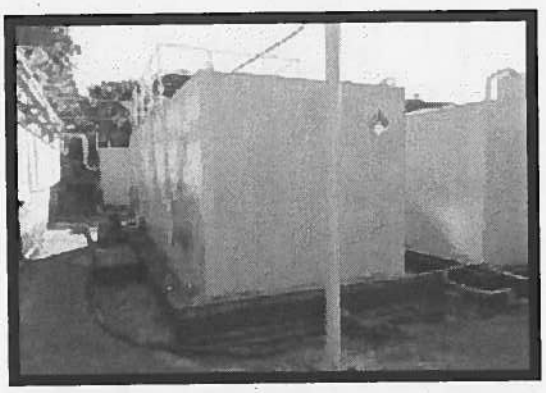

| Course #1 | |
|---|---|
| TML #1 | 0.272 |
| TML #4 | 0.263 |
| TML #7 | 0.257 |
| TML #10 | 0.260 |

| | |
|---|---|
| Min | 0.257 |
| Average | 0.263 |
| Max | 0.272 |

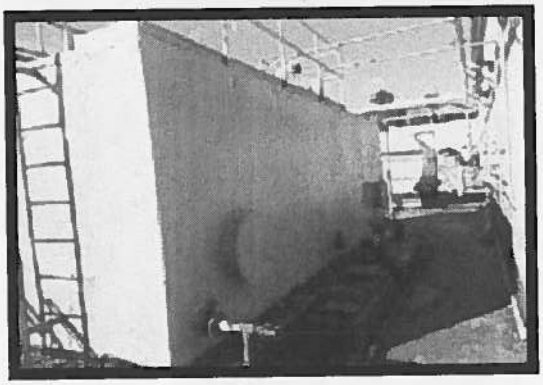
## 6.0 PICTURES



Side of Tank

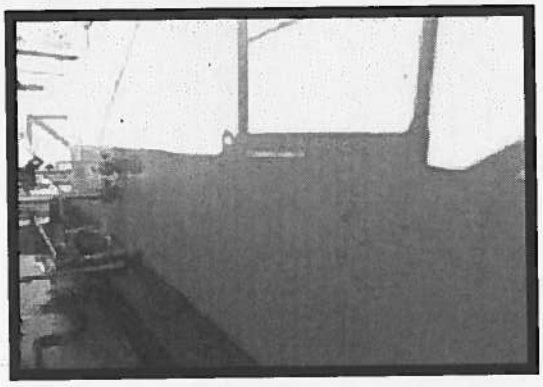


Tank



Tank corner

Epoxy coating



Wall picture

Tank Top Picture

## 7.0 GPS Location Map

**Address:** 814 West 23rd. Los Angeles, CA 90007

**GPS:** Latitude 34.072526
Longitude -118.278038

DIVERSIFIED PROJECT SERVICES
INTERNATIONAL

# Customer: AllenCo
# AB 1960 Certified Inspection
# 12/13/2012

## Injection Water Tank #3
## AllenCo Energy Lease
## 814 West 23rd. Los Angeles, CA 90007
## MI121212

5001 E. Commercenter Drive, Suite 250, Bakersfield, CA, 93309
P: (661) 371-2800, F: (661-371-2801)
www.dpsiinc.com

# INDEX


1.0 Executive Summary

2.0 Tank Summary

3.0 Inspection Personnel

4.0 Engineering Calculations
- 4.1 Shell Renewal Calculations
- 4.2 Shell Corrosion Rate
- 4.3 Next Inspection Date

5.0 Shell Diagram

6.0 Pictures

7.0 GPS Location Map

## 1.0 EXECUTIVE SUMMARY

**AllenCo has contracted Diversified Project Services International, Inc. to perform an In Service inspection on the Lease located at 814 W. 23rd. St. Los Angeles, CA 90007. This inspection was completed with the current criteria set forth in AB 1960 Title 14, Division 2, Chapter 4, Section 1773.4.**

**The primary goal of this inspection is to provide your company with an assessment of the equipment condition. The resultant report shall contain the required information to assess the general condition of the tank shell per AB 1960.**

**The ultrasonic thickness readings and visual inspection methods were used to assess the shell plate condition. These methods were used externally and provided data relating to the present condition of the equipment.**

**The tank is arectangular, 1 course above ground storage tank that is currently in service. This tank is 8'H x 20'L x 10'W and equipped with a welded fixed roof. The following lists all findings and recommendations.**

**A total of 4 spot thickness readings were taken at the Thickness Monitoring Locations (TML) shown on the provided Shell Diagram (5.0). For all corrosion data based on the gathered thickness readings see Shell Renewal Calculations (4.0). The re-inspection date is based on AB 1960 Section 1773.4.a.**

**No visual external corrosion was noted on shell staves.**

RECOMENDATIONS:

**It is recommended to properly identify this tank with the operator's tank identification number as stated in AB1960 1773.3 (a).**

Inspector Signature:_____

Brian Wilson API 653 Certification # 6051

## 2.0 TANK SUMMARY

### General

| | |
|---|---|
| **Tank Number:** | None |
| **Tank Owner:** | AllenCo |
| **Construction Design:** | API 12F (Shop welded - 90-750bbl) |
| **Product:** | Injection Water |
| **Specific Gravity:** | 1 |
| **Manufacturer:** | Unknown |
| **Manufacture Date:** | Unknown |
| **Data Plate Present:** | None |
| **NFPA Placard:** | Yes |

### Dimensions

| | Round | Square |
|---|---|---|
| **Diameter (ft.):** | | |
| **Height (ft.):** | | 8 |
| **Length (ft.):** | | 20 |
| **Width (ft.):** | | 10 |
| **Capacity (BBLS):** | 0 | 284.95 |

### Design

| | |
|---|---|
| **Foundation:** | Native Soil w/ Ringwall |
| **Secondary Containment:** | Concrete Containment |
| **Leak Detection Barrier:** | Yes |
| **Cathodic Protection:** | None |
| **Ground Cable:** | None |
| **Bottom:** | Butt Welded |
| **Shell:** | Butt Welded |
| **Roof:** | Butt Welded |
| **Primary Seal:** | None |
| **Secondary Seal:** | None |

### Access

| | |
|---|---|
| **Internal Access:** | Manway |
| **Roof Access:** | Vertical Ladder w/o Platform |

### Coatings

| | |
|---|---|
| **Floor Internal:** | Unknown |
| **Shell Internal:** | Unknown |
| **Shell External:** | Epoxy Coated |
| **Roof: External:** | Epoxy Coated |

## 3.0 INSPECTION PERSONNEL AND QUALIFICATIONS:

**DPSI examination personnel are qualified and certified in accordance with DPSI's Quality Assurance Program, Procedure DPSI-WP-01. This procedure meets or exceeds the guidelines contained in the American Society for Nondestructive Testing's Recommended Practice, SNT-TC-1A.**

**Brian Wilson**
**API 653 Inspector**

**Ron Allen**
**Level II ASNT Technician**

**Jesse Kindrat**
**Technician Assistant**

**Shane Manning**
**Technician Assistant**

## 4.0 SHELL RENEWAL CALCULATIONS

**T prev = previous thickness measurement of shell course under consideration, as recorded at last inspection or nominal thickness if no previous thickness measurements, in inches.**

**T act = Minimum thickness measurement of the shell course under consideration, as recorded at the time of inspection, in inches.**

**T min = minimum required thickness of shell course, at the maximum allowable fill height, in inches.**

**Ca = Remaining corrosion allowance of the shell course under consideration, in inches.**

**Cr = Corrosion rate of the shell course under consideration, in inches per year.**

**RL = Estimated remaining life of the shell course under consideration, in years.**

**FHc = Calculated Fill Height = SEtact/2.6DG+1 (SEtact/4.6DG+.3) plus the total product height below the course of study, in feet.**

**Yt = Time span between thickness readings or age of the tank if nominal thickness is used for tprev, in years.**

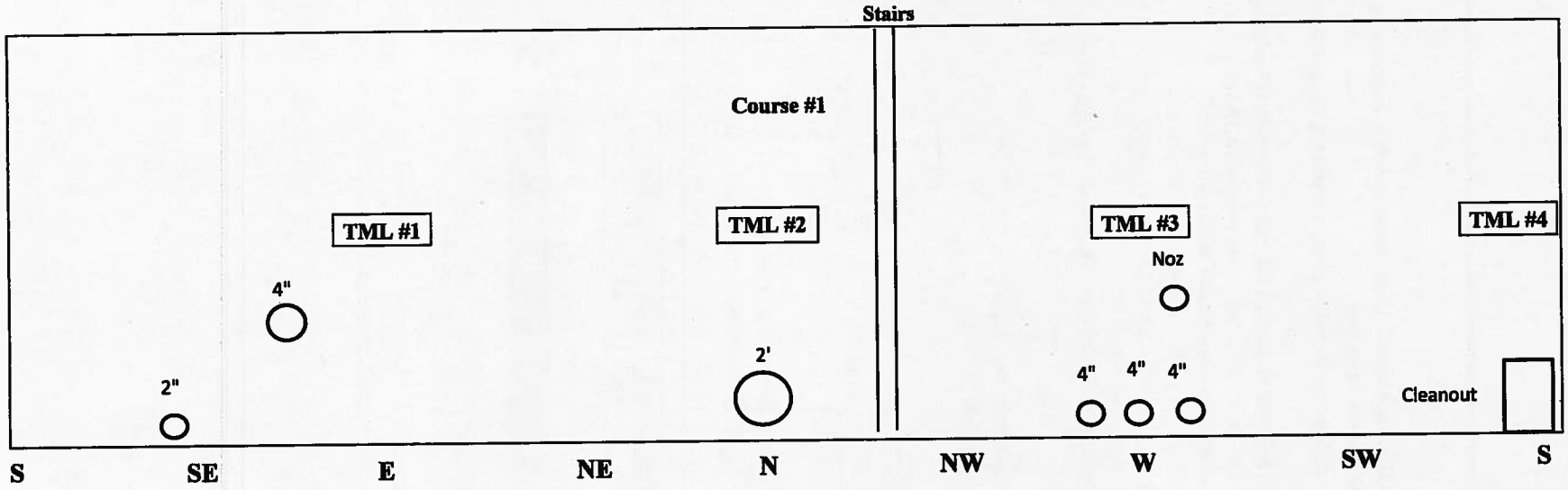
**Ca = T act - T min = Remaining Corrosion Allowance (inches)**
**Cr = T prev - T act / Yt = Corrosion Rate (inches per year)**
**RL = Ca / Cr = Remaining Life (years)**

| | | |
|---|---|---|
| **Date Inspected** | **12/14/2012** | |
| **Yt = Tank age (years)** | **20** | (Estimated) |
| **E = Efficiency** | **1** | |
| **D = Tank Diamter** | **-** | |
| **Y = Min. Yield Strength** | **30000** | ** 30000 lbf/in² if unknown |
| **T = Min. Tensile Strength** | **55000** | ** 55000 lbf/in² if unknown |
| **G = Product Garvity** | **1** | |

| Course | T prev | T act | T min | Ca | Cr | RL |
|---|---|---|---|---|---|---|
| Course 1 | 0.281 | 0.223 | 0.060 | 0.163 | 0.003 | 56.2 |

***** Next Inspection Due Date:** **December 14, 2017**

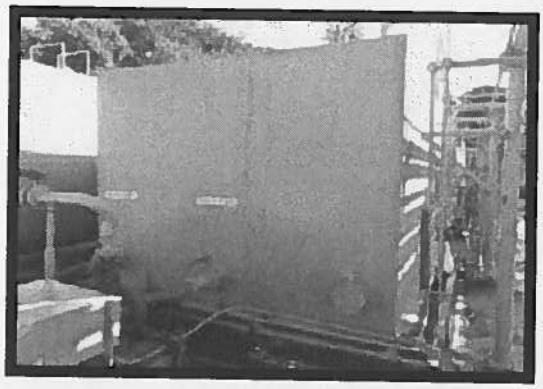
## 5.0 SHELL DIAGRAM AND THIKNESS DATA



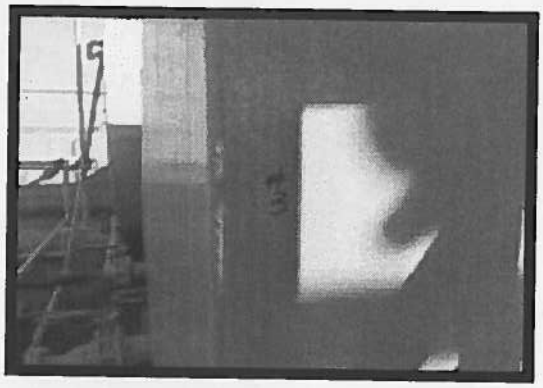

| Course #1 | |
|---|---|
| TML #1 | 0.229 |
| TML #4 | 0.223 |
| TML #7 | 0.235 |
| TML #10 | 0.231 |

| | |
|---|---|
| Min | 0.223 |
| Average | 0.230 |
| Max | 0.235 |

## 6.0 PICTURES

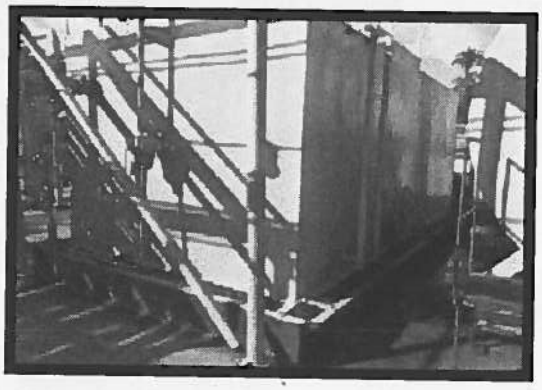


Tank Side View

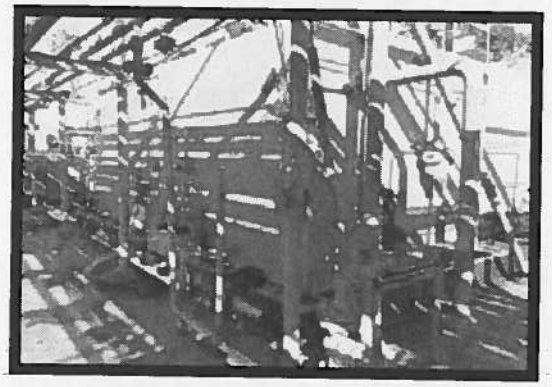


Side view

Side View



Tank Side View



Side View

## 7.0 GPS Location Map

**Address:** 814 West 23rd. Los Angeles, CA 90007

**GPS:** Latitude 34.072526
Longitude -118.278038